1 Example FoxH-Macdonald_function_2_9_33.wls

File content

Fox H-function

$$H_{1,2}^{2,1}\left(egin{array}{c} \left(\gamma-rac{1}{c}+1,rac{1}{c}
ight) \\ \left(c\gamma,1
ight),\left(0,rac{1}{c}
ight) \end{array}
ight)$$

$$H_{1,2}^{2,1}\left(\cdot\left|\begin{array}{c}\left(\gamma-rac{1}{c}+1,rac{1}{c}
ight)\\ \hline \left(c\gamma,1
ight),\left(0,rac{1}{c}
ight)\end{array}
ight)$$

Summary

$$\begin{split} a^* &= \frac{c+2}{c} \\ \Delta &= 1 \\ \delta &= \text{Indeterminate} \\ \mu &= c\gamma - \gamma + \frac{1}{c} - \frac{3}{2} \\ a_1^* &= \frac{1}{c} + 1 \\ a_2^* &= \frac{1}{c} \\ \xi &= c\gamma + \gamma - \frac{1}{c} + 1 \\ c^* &= \frac{3}{2} \end{split}$$

Poles 1. First eight poles from upper front list

$$a_{i,k} = \begin{pmatrix} 1 - c\gamma & -\gamma c + c + 1 & 1 - c(\gamma - 2) & 1 - c(\gamma - 3) & 1 - c(\gamma - 4) & 1 - c(\gamma - 5) & 1 - c(\gamma - 6) \end{pmatrix}$$

2. First eight poles from lower front list

$$b_{j,\ell} = \begin{pmatrix} -c\gamma & -c\gamma - 1 & -c\gamma - 2 & -c\gamma - 3 & -c\gamma - 4 & -c\gamma - 5 & -c\gamma - 6 & -c\gamma - 7 \\ 0 & -c & -2c & -3c & -4c & -5c & -6c & -7c \end{pmatrix}$$