## 1 Example FoxH-Macdonald\_function\_2\_9\_33.wls

File content

Fox H-function

$$H_{1,2}^{2,0}\left(\cdot \left| \begin{array}{c} \left(\gamma-\frac{1}{N}+1,\frac{1}{N}\right)\\ \left(\gamma N,1\right),\left(0,\frac{1}{N}\right) \end{array} \right)$$

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

Summary

$$\begin{aligned} a^* &= 1 \\ \Delta &= 1 \\ \delta &= \text{Indeterminate} \\ \mu &= -\gamma + \gamma N + \frac{1}{N} - \frac{3}{2} \\ a_1^* &= 1 \\ a_2^* &= 0 \\ \xi &= -\gamma + \gamma N + \frac{1}{N} - 1 \\ c^* &= \frac{1}{2} \end{aligned}$$

Poles 1. First eight poles from upper front list

$$a_{i,k} = \{\}^T$$

2. First eight poles from lower front list

$$b_{j,\ell} = \begin{pmatrix} \gamma(-N) & 0 \\ \gamma(-N) - 1 & -N \\ \gamma(-N) - 2 & -2N \\ \gamma(-N) - 3 & -3N \\ \gamma(-N) - 4 & -4N \\ \gamma(-N) - 5 & -5N \\ \gamma(-N) - 6 & -6N \\ \gamma(-N) - 7 & -7N \end{pmatrix}^{T}$$