

$$\mu_{in} := 2 \quad \mu_{out} := 2.5 \quad p_{origin} := 0.8 \quad S := 5$$

$$p_1 := \frac{p_{origin}}{S} = 0.16 \quad \lambda := \frac{\mu_{out}}{\frac{\mu_{in}}{p_{origin}} \cdot S} = 0.2$$

$$r := \frac{\left(\frac{\mu_{in}}{\mu_{out}}\right)^2 \cdot \left(1 + \frac{\sqrt{\mu_{out}^{-2}}}{\mu_{out}^{-1}}\right)^2}{2 \cdot \left(1 - \frac{\mu_{in}}{\mu_{out}}\right)} = 6.4 \quad r := \frac{\left(\frac{p_1}{\lambda}\right)^2 \cdot \left(1 + \frac{\sqrt{\lambda^{-2}}}{\lambda^{-1}}\right)^2}{2 \cdot \left(1 - \frac{p_1}{\lambda}\right)} = 6.4$$

$$\sum_{i=0}^{\infty} \left((1-p_1)^i (1-e^{-\lambda \cdot i}) - p_1 \cdot e^{-\lambda \cdot i} \right) \rightarrow 2.1649388707243052718$$

$$\sum_{i=0}^{\infty} (p_1 \cdot e^{-\lambda \cdot i}) \rightarrow 0.8826648905803191688$$

$$\sum_{i=0}^{\infty} \left((1-p_1)^i (1-e^{-\lambda \cdot i}) \right) \rightarrow 3.0476037613046244406$$

$$\sum_{x=0}^{\infty} (1-p_1) e^{-\lambda \cdot x} \rightarrow 4.6339906755466756362$$

$$\sum_{i=0}^3 \left(p_1 \cdot e^{-\lambda \cdot i} - \sum_{j=1}^i (1-p_1) (1-e^{-\lambda \cdot (j-1)}) \right) \rightarrow -0.095405506525829850091$$

$$\lim_{x \rightarrow \infty} \frac{(1-p_1) (1-e^{-\lambda \cdot x})}{p_1 \cdot e^{-\lambda \cdot x}} \rightarrow \infty$$