

$$\begin{aligned}\sum_{n=1}^{\infty} [(0.6)^{n-1} - (0.2)^n] &= \sum_{n=1}^{\infty} (0.6)^{n-1} - \sum_{n=1}^{\infty} (0.2)^n \\ &\quad \text{[difference of two convergent geometric series]} \\ &= \frac{1}{1-0.6} - \frac{0.2}{1-0.2} = \frac{5}{2} - \frac{1}{4} = \frac{9}{4}\end{aligned}$$