



**Tecnológico
de Monterrey**

Quantitative Methods and Simulations

Activity 09

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August – December 2021

November 26th, 2021

$$\mu = 10, \lambda = 8, s = 4$$

a. Número de autos en el sistema

$$P_0 = \left(\sum_{n=0}^{s-1} \left(\frac{\lambda^n}{n! \mu^n} \right) + \left(\frac{\lambda^s}{s! \mu^s \left(1 - \frac{\lambda}{s\mu} \right)} \right) \right)^{-1}$$

$$P_0 = \left(\frac{1825643}{8203125} \right)^{-1} = (2.22555)^{-1} = 0.4493$$