

Quiz 3

Q7. If $Y = X_1 + X_2 + \dots + X_n$
and $X_i \sim \text{Poisson}(\lambda)$, then

$$Y \sim \text{Poisson}(n\lambda).$$

Part 2:

$$\lambda_A = 2.3 \text{ for } t_A = 2 \text{ hours}$$

$$t_B = 30 \text{ minutes} = \frac{1}{4} t_A$$

$$\begin{aligned} \text{So } \lambda_B &= \frac{1}{4} \lambda_A = \frac{23}{10} \cdot \frac{1}{4} = \frac{23}{40} \\ &= 0.575 \end{aligned}$$