

Problema 8

a) $Y =$ "numero accidents per setmana"

$$Y \sim \text{Poisson}(5)$$

$$\begin{aligned} \text{a)} \quad P(Y \geq 1) &= 1 - P(Y=1) = 1 - P(Y=0) \\ &= 1 - e^{-5} \end{aligned}$$

b) $Z =$ "numero accidents en dos setmanes"

$$Z \sim \text{Poisson}(10)$$

$$P(Z=2) = e^{-10} \frac{10^2}{2}$$

$$\text{c)} \quad P(Y_1=3) P(Y_2=2)$$

$$= e^{-5} \frac{5^3}{3!} \cdot e^{-5} \frac{5^2}{2!}$$