

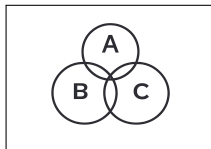
21

Discrete Distribution Poisson Variable

U

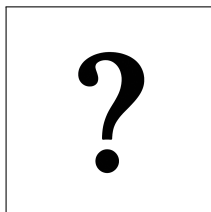


$$\lambda = 1$$



$$P(X = k) = e^{-\lambda} \frac{\lambda^k}{k!}$$

$$P(X = 0) = e^{-1} \frac{1^0}{0!} = e^{-1} \approx \boxed{0.37}$$



$$p = 0.25$$

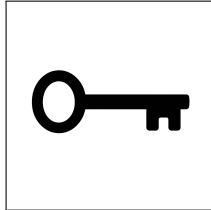
$$n = 5$$

$$P(K = 0) = ?$$

21

Discrete Distribution Poisson Variable

U



$$\begin{aligned}p &= 0.25 \\n &= 5 \\P(K = 0) &= ?\end{aligned}$$

$$\begin{aligned}\lambda &= 5 \times 0.25 = 1.25 \\P(K = 0) &= e^{-1.25} \approx \boxed{0.2865}\end{aligned}$$