

Solutions

A computer help line receives on average 2 calls every 10 minutes such that $X \sim \text{Po}(2)$.

Define the exponential distribution in this situation: The time waiting between each phone call

On average a tool hire firm receives requests to hire out 2 floor sanders a day. The firm has 3 sanders and charges £40 per day such that $X \sim \text{Po}(2)$.

Define the exponential distribution in this situation: The time between each request for a floor sander

A bad stretch of road has, on average, 65 accidents per year such that $X \sim \text{Po}(65)$.

Define the exponential distribution in this situation: The time between each accident

A van hire firm know from their records that the daily demand for vans is 8 per day such that $X \sim \text{Po}(8)$.

Define the exponential distribution in this situation: The time between each van hire

A bus company's records show that on average 4 buses a week break down such that $X \sim \text{Po}(4)$.

Define the exponential distribution in this situation: The time between each bus break down

Electric wire is produced in lengths of 300 metres. On average there is 1 defect in every 3000 metres of wire produced such that $X \sim \text{Po}(0.1)$.

Define the exponential distribution in this situation: The length between each defect in the wire
