

Checklist

What you should know

By the end of this subtopic you should be able to:

- state that a random variable follows a Poisson distribution when an event of the variable is equally likely to occur in any interval and the occurrences of the event are independent of each other
- calculate probabilities for a certain number of occurrences for a Poisson distributed random variable
- calculate the probabilities for a range of occurrences for a Poisson distributed random variable
- state that the value of m can be scaled to fit the interval needed
- state that the expectation and variance of a Poisson distributed variable are both equal to m
- find the probabilities of a combination of Poisson distributed variables by adding their respective values of m together to create a new Poisson-distributed variable.

