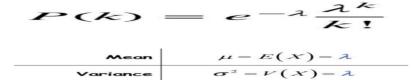
3. Plotting and fitting of Poisson distribution and graphical representation of probabilities.

The Poisson distribution is a type of discrete probability distribution that determines the likelihood of an event occurring a specific number of times (k) within a designated time or space interval. This distribution is characterized by a single parameter, λ (lambda), representing the average number of occurrences of the event.

Poisson Distribution Formula



Where:

- P(X=k) is the probability of observing k events
- e is the base of the natural logarithm (approximately 2.71828)
- λ mean number of success that occur during a specific interval, $\lambda = np$
- k is the number of success

how to implement in excel

POISSON.DIST(number_s,average,cumulative)

POISSON.DIST(k, λ , FALSE)

