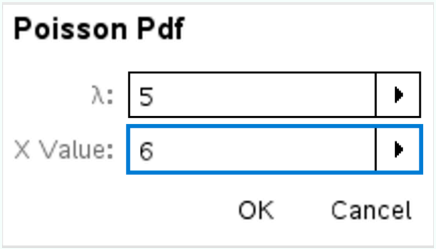
4.12 Poisson distribution

4.12.1 Compute $\mathbf{P}(X = a)$

Consider $X \sim \text{Po}(5)$. Suppose you want to know $\mathbf{P}(X = 6)$.

Press menu, select Probability > Distributions > Poisson Pdf and fill the parameters as follows:

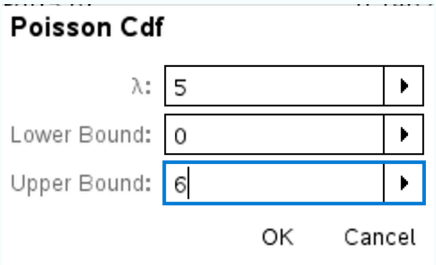


Press enter. The result should be 0.146 (rounded).

4.12.2 Compute $\mathbf{P}(X \leq a)$

Consider $X \sim \text{Po}(5)$. Suppose you want to know $\mathbf{P}(X \leq 6)$.

Press menu, select Probability > Distributions > Poisson Cdf and fill the parameters as follows:



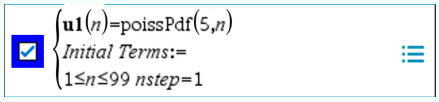
Press enter. The result should be 0.762 (rounded).

4.12.3 Graph a Poisson distribution

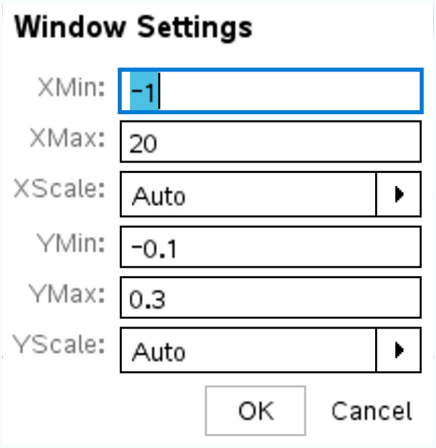
Consider $X \sim \text{Po}(5)$. Suppose you want to graph it.

① Create a new document and select Add Graphs.

② Press menu and select Graph Entry/Edit > Sequence > Sequence. Enter the parameters as follows:



③ Choose a proper window :



④ Press enter . The following should be displayed: