

Information Sheet

Graphs on StatCrunch

Bar Graph:

Categories in one column, frequencies in next column

Graph > Bar plot

Pie Chart:

Categories in one column, frequencies in next column

Graph > Pie Chart > With Summary

Stem-and-Leaf:

Data in one column

Graph > Stem-and-leaf

Boxplot:

Data in one column

Graph > Boxplot

Select the boxes for drawing the graph horizontally and for using fences to identify outliers

StatCrunch Calculations

Mean, median, ...:

Data in one column

Stat > Summary Statistics > Columns

Select the measure(s) you want to calculate

Correlation & Regression:

x-values in one column, corresponding y-values in next column

Stat > Regression > Simple Linear

Select x & y columns

Output will include the correlation coefficient and the regression equation

Binomial/Poisson/Normal/Reverse Normal:

You will find the appropriate calculator under Stat > Calculators

(Round all probabilities to 4 places.)

Formulas

Lower Fence: $Q_1 - 1.5(IQR)$

Upper Fence: $Q_3 + 1.5(IQR)$

$$IQR = Q_3 - Q_1$$

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

$$\bar{x} = \frac{\sum x}{n}$$

Permutations: ${}_n P_r = \frac{n!}{(n-r)!}$

Combinations: ${}_n C_r = \frac{n!}{r!(n-r)!}$

General Addition Rule: $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$

Multiplication Rule: $P(\text{All } A) = P(A_1) \cdot P(A_2) \cdot \dots$

Binomial: List n , x , and p

Poisson: List mean and x

Normal Probability: List mean, standard deviation, and x

Reverse Normal: List mean, standard deviation, tail (left or right) and area