Bivariate Data:

Example:

Scatter Plot:

Independent variable vs. dependent variable:

Random vs. non-random:

Correlation vs. causation:

Linear vs. nonlinear:

Freehand regression line:

To find the equation of a line we need:

1. 2.

Two steps:

1.

2.

Examples:

WARNING:

Method of Least Squares:

Making predictions – Interpolation and extrapolation:

Notes

Correlation:

Correlation coefficient:

Estimating the correlation coefficient:

Some notes: 1. 2.

- 3.
- 4.
- 5.
- 6.