**Lesson 1**

Regression

(graphs drawn using <https://www.desmos.com/calculator>)

Linear Regression is a topic in statistics that is used as a predictive analysis tool.

It aims to form relationships between data points and:

* determining the strength of predictors,
* forecasting an effect,
* trend forecasting.

Regression can be non-linear

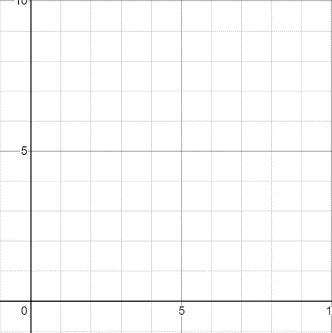
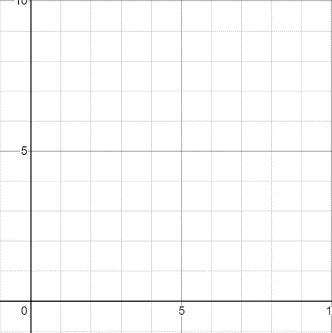
Linear Regression Analysis

x axis : Independent variable

y axis : Dependent variable

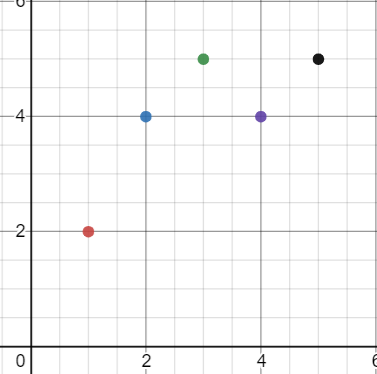
graph 1 : positive relationship (m)

graph 2 : positive relationship (-m)



Least-squares regression (line of best fit)





**Lesson 2**

Training models

A model is a dataset that represents reality

A dataset should be 10x it’s dimension and independent of the model used

**Lesson 2**