

Equation for a line

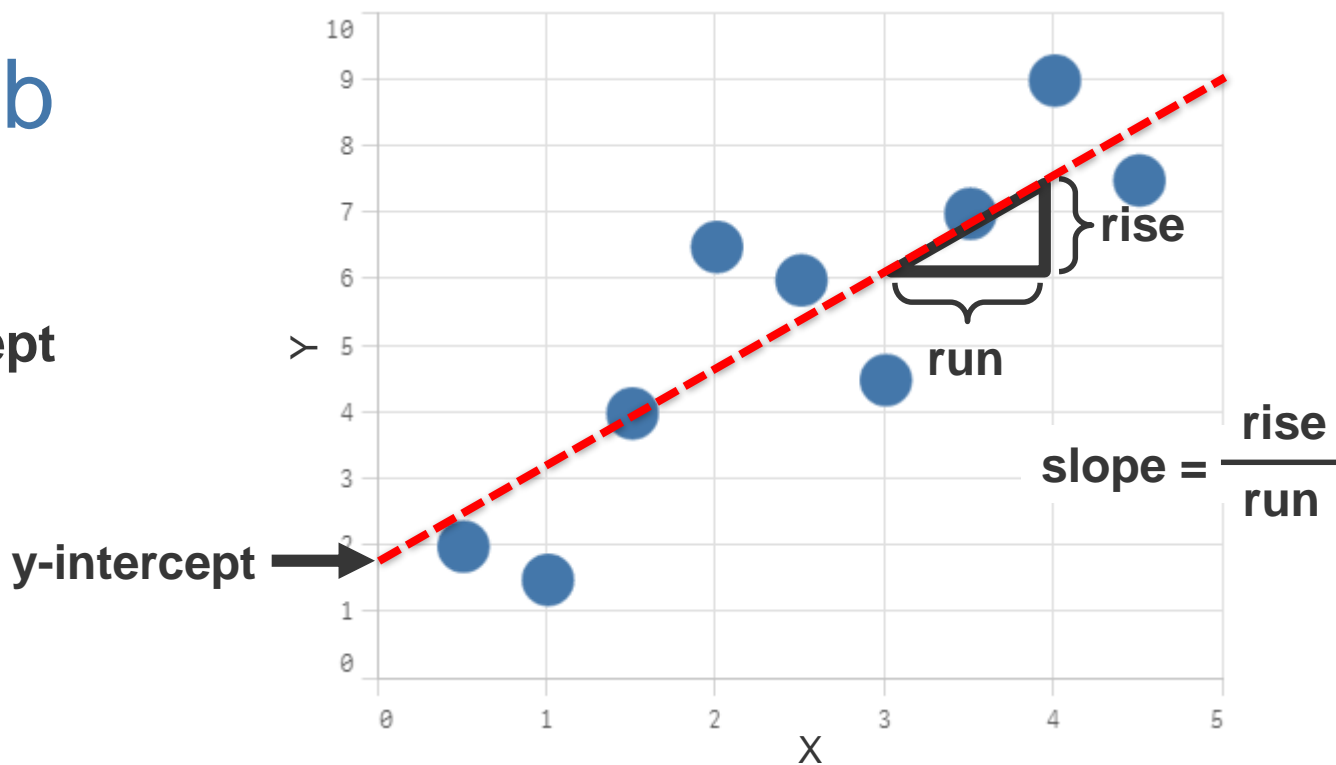
$$y = mx + b$$

$m = \text{slope}$

$b = \text{y-intercept}$

slope
1.4

y-intercept
1.9



Correlation coefficient

r ranges between -1 and 1

r² ranges between 0 and 1

r
0.84

r²
0.71

LINEST_M(Y, X)

LINEST_M() returns the aggregated m value (slope) of a linear regression defined by the equation $y=mx+b$ for a series of coordinates represented by paired numbers given by the expressions x_value and y_value, iterated over the chart dimensions.

- value indicates steepness of line
- positive slope = positive correlation
- negative slope = negative correlation
- apply in equation ($y=mx+b$) to predict values

LINEST_B(Y, X)

LINEST_B() returns the aggregated b value (y-intercept) of a linear regression defined by the equation $y=mx+b$ for a series of coordinates represented by paired numbers in the expressions given by the expressions x_value and y_value, iterated over the chart dimensions.

- value of y when $x = 0$
- apply in equation ($y=mx+b$) to predict values

Correl(Y, X)

Correl() returns the aggregated correlation coefficient for two data sets. The correlation function is a measure of the relationship between the data sets and is aggregated for (x,y) value pairs iterated over the chart dimensions.

- value closer to 1 indicates strong positive relationship
- value closer to -1 indicates strong inverse relationship
- value closer to zero indicates weak relationship

LINEST_R2(Y, X)

LINEST_R2() returns the aggregated r2 value (coefficient of determination) of a linear regression defined by the equation $y=mx+b$ for a series of coordinates represented by paired numbers given by the expressions x_value and y_value, iterated over the chart dimensions.

- value closer to 1 indicates a good fit of data to the model
- value closer to 0 indicates a poor fit of data to the model