

Week 12 Polling

A researcher tests the extent to which the timing of a stimulus presentation can be used to predict the frequency of a behavioral response. Which variable is the predictor?

The frequency of a behavioral response

The timing of a stimulus presentation

Both variables are predictors in this example

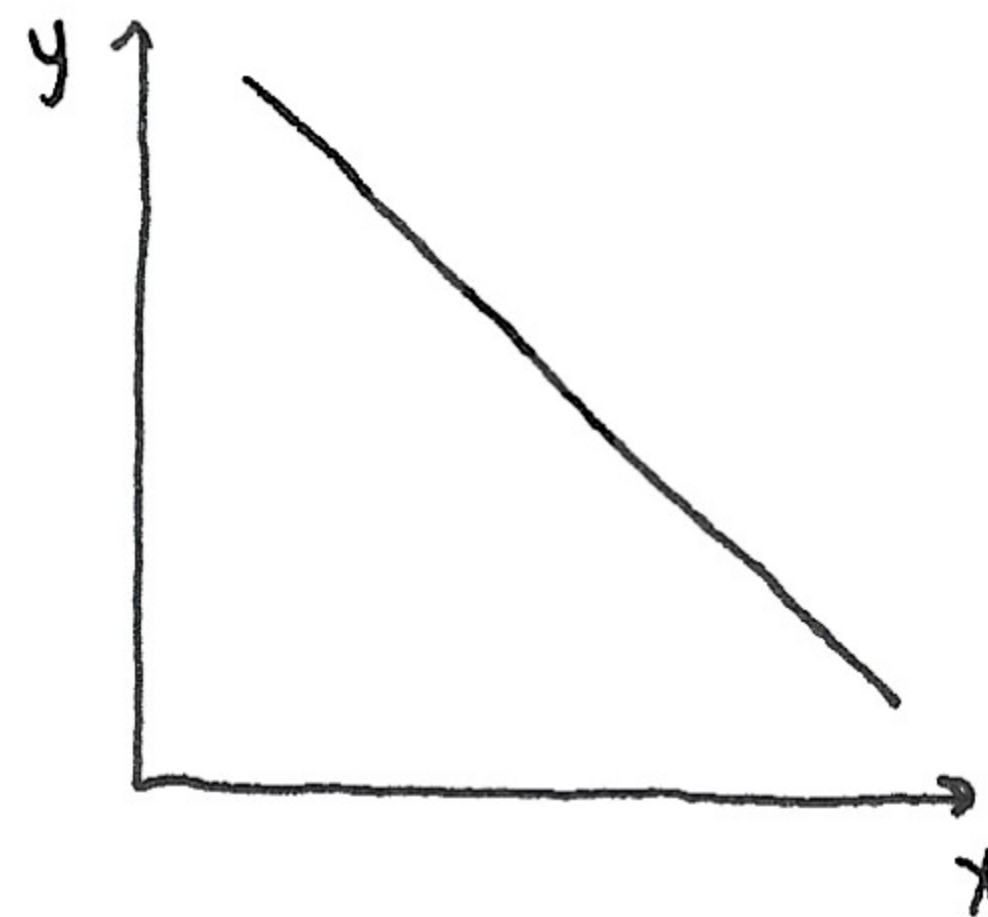
When pairs of scores for two variables move in the opposite directions, the slope of the regression line is:

Nonlinear

Positive

Negative

Minimal



A statistical procedure used to compute the intercept and slope of the regression line is called the:

The method of least squares

The method of most squares

The method of common squares

The method of data squares

An analysis of regression measures only the variance in ___ because it is the value we want to predict.

X

The predictor variable

Y

If $b = .54$, $M_Y = 3.25$, $M_X = 5.85$, then what is the value of the intercept for the regression line?

0.09

4.07

10.27

-18.47

$$\begin{aligned} a &= M_Y - b(M_X) \\ a &= 3.25 - .54(5.85) \\ a &= 3.25 - 3.159 \\ a &= .09 \end{aligned}$$

The standard error of the estimate is a measure of:

The accuracy of predictions made using the equation of a regression line

The square root of the mean square residual

The average distance that data points fall from the regression line

All of the above