# How can I calculate the PEARSON correlation coefficient in Google Sheets?

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The Pearson correlation coefficient, also known as the Pearson's r, is a statistical measure that determines the strength and direction of the linear relationship between two variables. In Google Sheets, this can be calculated using the CORREL function. This function takes two sets of data as inputs and returns the Pearson correlation coefficient value as the result. Simply select the cells containing the two sets of data and use the formula "=CORREL(range1, range2)" to calculate the coefficient. The value will range from -1 to 1, with a value of 1 indicating a perfect positive correlation, 0 indicating no correlation, and -1 indicating a perfect negative correlation. This tool in Google Sheets can be useful in analyzing data and understanding the relationship between variables.

## PEARSON

Calculates r, the Pearson product-moment correlation coefficient of a dataset.

### Sample Usage

`PEARSON(A2:A100,B2:B100)`

### Syntax

`PEARSON(data_y, data_x)`

`data_y` - The range representing the array or matrix of dependent data.

`data_x` - The range representing the array or matrix of independent data.

### Notes

Any text encountered in the `value` arguments will be ignored.

`PEARSON` is synonymous with `CORREL`.

### See Also

`STEYX`: Calculates the standard error of the predicted y-value for each x in the regression of a dataset.

`SLOPE`: Calculates the slope of the line resulting from linear regression of a dataset.

`RSQ`: Calculates the square of r, the Pearson product-moment correlation coefficient of a dataset.

`INTERCEPT`: Calculates the y-value at which the line resulting from linear regression of a dataset

will intersect the y-axis (x=0).

`FORECAST`: Calculates the expected y-value for a specified x based on a linear regression of a dataset.

`FISHERINV`: Returns the inverse Fisher transformation of a specified value.

`FISHER`: Returns the Fisher transformation of a specified value.

`COVAR`: Calculates the covariance of a dataset.

`CORREL`: Calculates r, the Pearson product-moment correlation coefficient of a dataset.

## Examples