

How can I find a line of best fit in Google Sheets?

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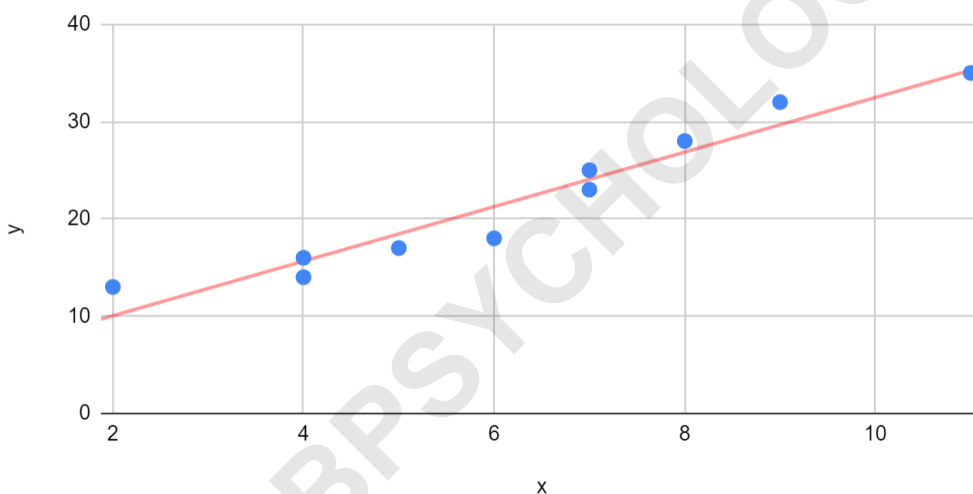
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A line of best fit, also known as a trendline, is a straight line that represents the overall trend of a set of data points on a scatter plot. This line is used to make predictions and analyze the relationship between two variables. In Google Sheets, the process of finding a line of best fit involves selecting the data points and using the "Insert" tab to add a trendline. The trendline can be customized by choosing the type of line and the equation displayed. It is a useful tool for visualizing and interpreting data in a clear and organized manner.

Find A Line of Best Fit in Google Sheets

A line of best fit is a line that best "fits" the trend in a given dataset.



This tutorial provides a step-by-step example of how to create a line of best fit in Google Sheets.

Step 1: Create the Dataset

First, let's create a fake dataset to work with:

	A	B	C	D
1	x	y		
2	2	13		
3	4	14		
4	4	16		
5	5	17		
6	6	18		
7	7	23		
8	7	25		
9	8	28		
10	9	32		
11	11	35		
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				

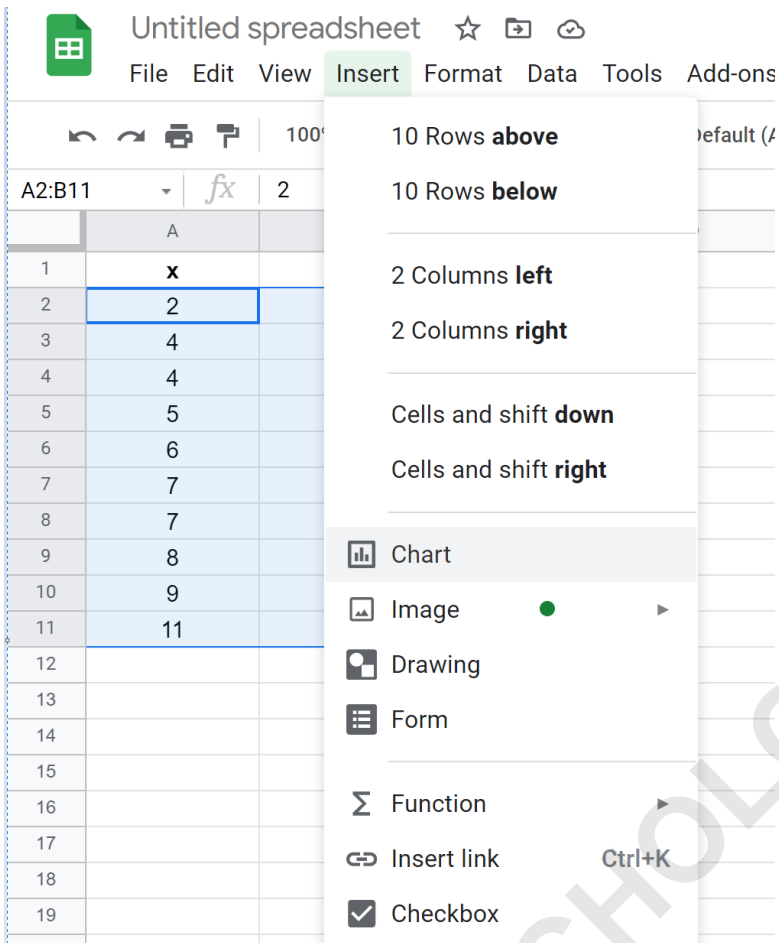
Step 2: Create a Scatterplot

Next, we'll create a to visualize the data.

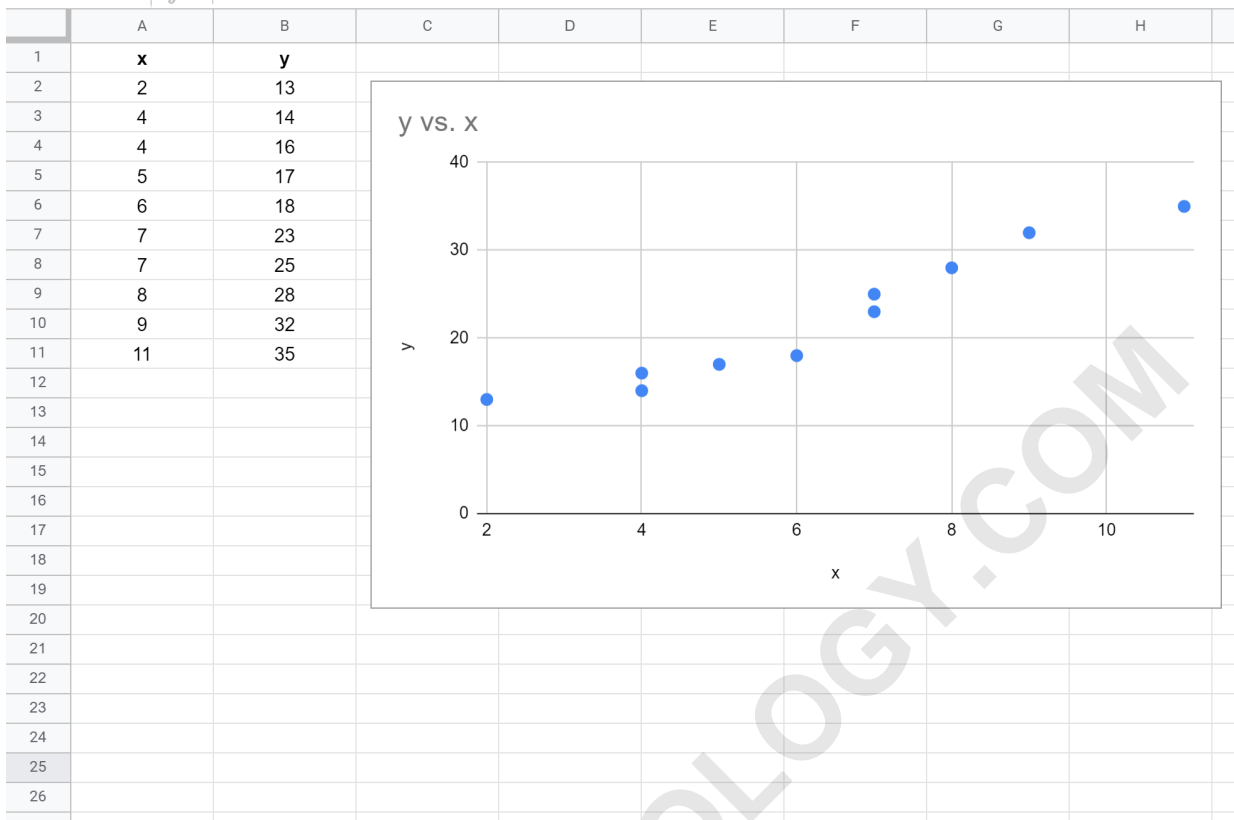
First, highlight cells A2:B11 as follows:

	A	B	C	D
1	x	y		
2	2	13		
3	4	14		
4	4	16		
5	5	17		
6	6	18		
7	7	23		
8	7	25		
9	8	28		
10	9	32		
11	11	35		
12				
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22				

Next, click the Insert tab and then click Chart from the dropdown menu:

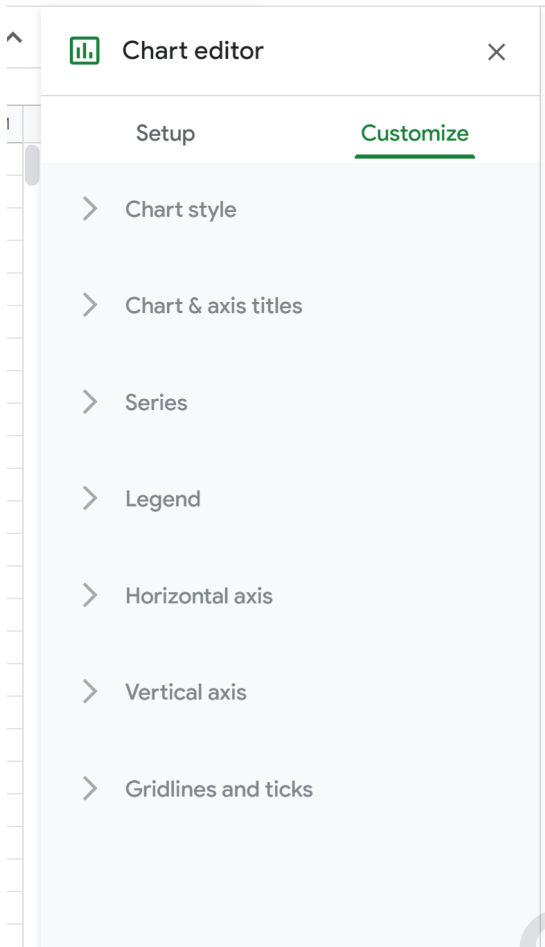


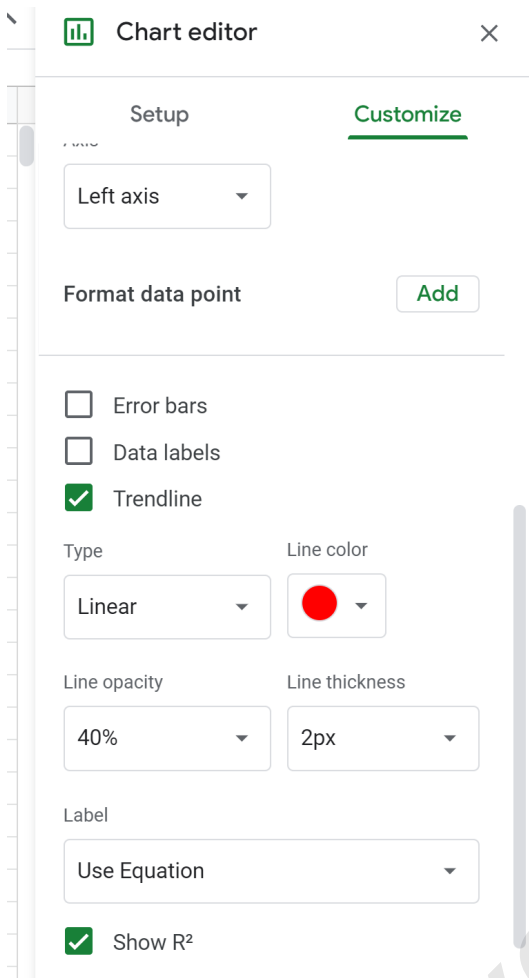
Google Sheets will automatically insert a scatterplot:



Step 3: Add the Line of Best Fit

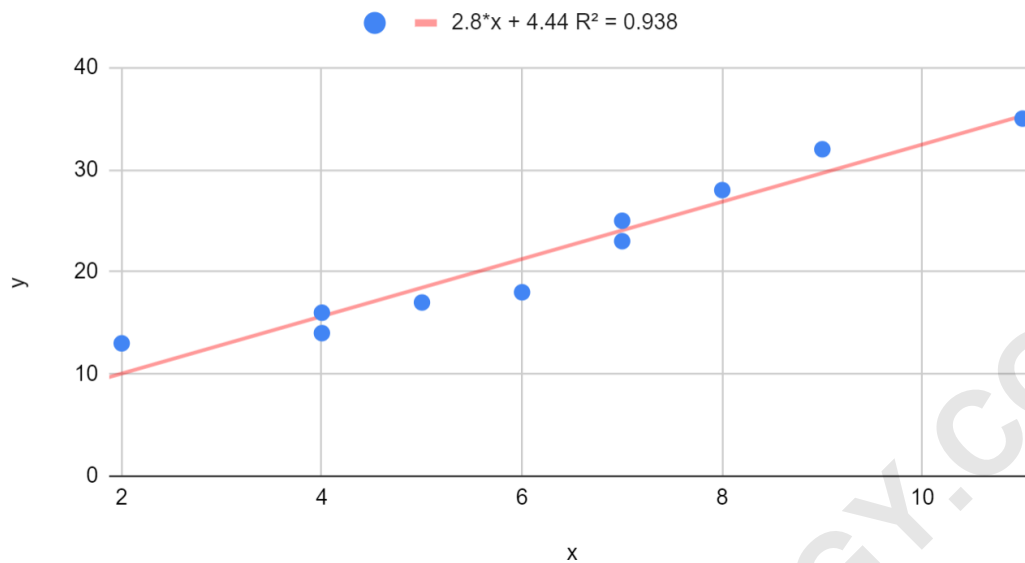
Next, double click anywhere on the scatterplot to bring up the Chart Editor window on the right:





The following trendline will automatically be added to the chart:

y vs. x



We can see that the line of best fit seems to capture the trend in the data quite well.

Above the scatterplot, we see that the equation for this line of best fit is as follows:

$$y = 2.8x + 4.44$$

The for this line turns out to be .938. This indicates that 93.8% of the variation in the response variable, y , can be explained by the predictor variable, x .

We can also use the equation for the line of best fit to find the estimated value of y based on the value of x . For example, if $x = 3$ then y is estimated to be 12.84:

$$y = 2.8*(3) + 4.44 = 12.84$$

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