

How to do a Linear Regression in Excel

1. Enter your data.

X	Y
1	27.41
2	40.47
3	49.63
4	54.18
5	77.86
6	98.73
7	101.48
8	133.77
9	172.83
10	171.96

2. Check to see if the Data Analysis package has been added to your copy of Excel.
 - a. Go to Data/Analysis/Data Analysis
 - i. If this path isn't available you will need to add in the Analysis ToolPak
 1. Click the windows icon in the upper left corner of the window
 2. Select Excel Options/Add-Ins/Manage Excel Add-Ins/Analysis ToolPak
 3. Click Go
3. Run the linear regression
 - a. Select Data/Analysis/Data Analysis/Regression
 - b. Click in the box "input y range". Then highlight the y values in your spreadsheet
 - c. Click in the box "input x range". Then highlight the x values in your spreadsheet
 - d. Click the "output range" circle, then click in the box to the right of the words "output range". Go to your spreadsheet and click in the upper left corner of the region where you want to place the regression output.
 - e. Click "ok" to run the linear regression
4. Examine the output.

	Coefficients	Standard Error	
Intercept	-0.86484	8.044196985	y-intercept and uncertainty
X Variable 1	17.03586	1.296439732	Slope and uncertainty

Round of results to proper number of significant figures.

$$b = -1 \pm 8$$

$$m = 17 \pm 1$$