

The good news is that scatter plots and linear regression is much easier to do on Excel than on the calculator. The bad news is that you need to know how to do it on both. (i.e. you won't have a computer in front of you for, say, the test).

Graphing a Scatter Plot

Again, obviously, in order to graph a scatter plot, you first must input the desired data. To do this, simply click any cell and start typing your data. You will want to list your data in columns (you can do it in rows, but columns will make things slightly more simple)

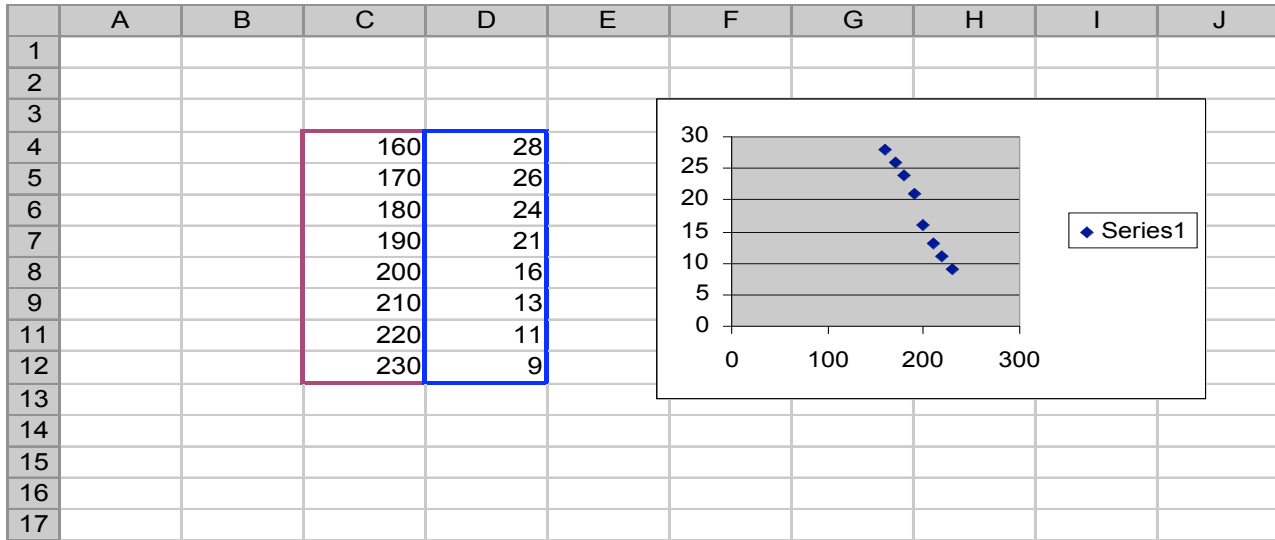
	A	B	C	D	E	F
1						
2						
3						
4			160	28		
5			170	26		
6			180	24		
7			190	21		
8			200	16		
9			210	13		
11			220	11		
12			230	9		
13						
14						
15						
16						
17						

After you have entered the data, you need to select all of it by clicking on the 160 and dragging down to the 9.

	A	B	C	D	E	F
1						
2						
3						
4			160	28		
5			170	26		
6			180	24		
7			190	21		
8			200	16		
9			210	13		
11			220	11		
12			230	9		
13						
14						
15						
16						
17						

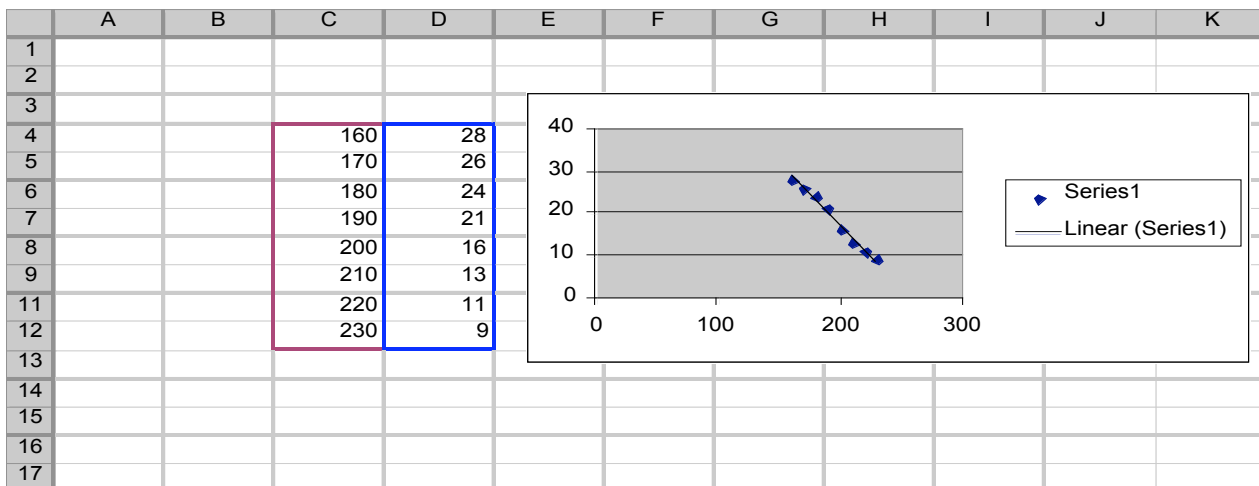
Next, you need to click on the **Insert** menu and select **Chart**. You will be presented with a list of chart types. Select **XY (Scatter)** and for 'sub-type' select the chart without any lines connecting the points. Click **Finish**. Yeah, really, that's it, that's all.

At this point you should have a scatter plot of the data.



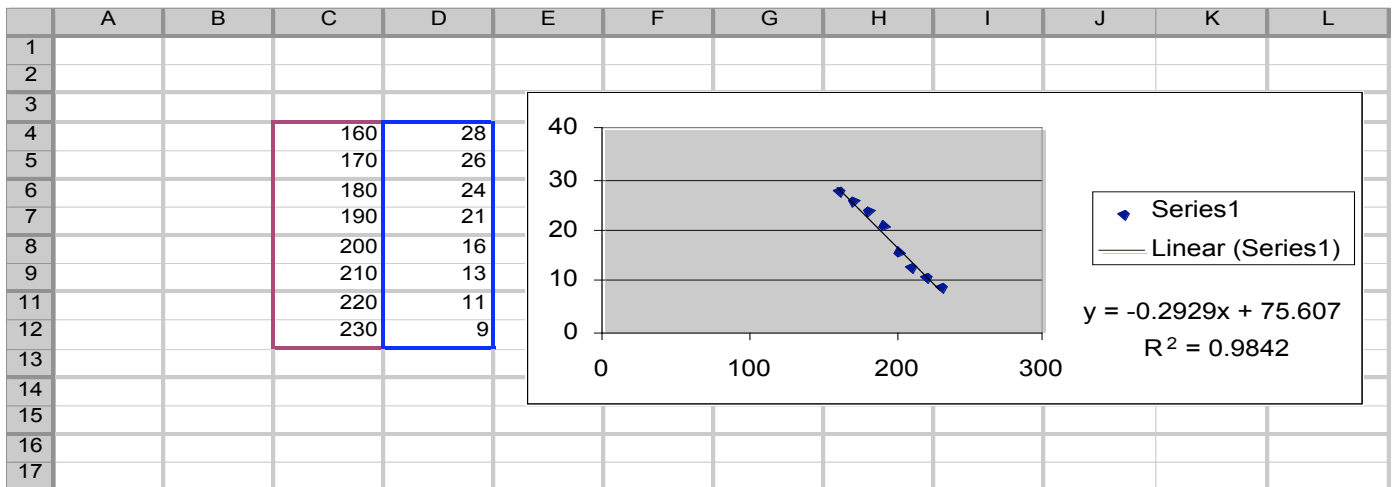
Okay, great but where is my regression line?

Again, simple. Select your chart, by clicking somewhere in the empty white space. Click the **Chart** menu and select **Add Trendline...** You will get a new window asking for what type of trendline you want. You want *Linear* and *Based on series:* Series 1 (Both of these should be the defaults). Click **OK**. Hey, look at that: Waiter, there is a line in my chart.



Alright already, what about the correlation coefficient!? And an equation for the line might be nice!

Calm down, we are almost done. This part is mildly tricky, but double click *on the trendline that you just added*. You will get a new window with three tabs: Patterns, Type, and Options. Select Options. The last two options should be “Display equation on chart” and “Display R-squared value on chart.” Check both boxes and Click **OK**.



You will probably want to move the equation and R-squared value over to the white space so that it can be more easily read. But there it is, the equation of the regression line (even in slope-intercept form!) and the r^2 value. Remember that we are actually only interested in the r value. This is an easy fix. I will let you figure it out on your own though. (Also keep in mind that we are interested in a *signed* r value (i.e. + or -), so keep in mind which one you want for a given regression line.)