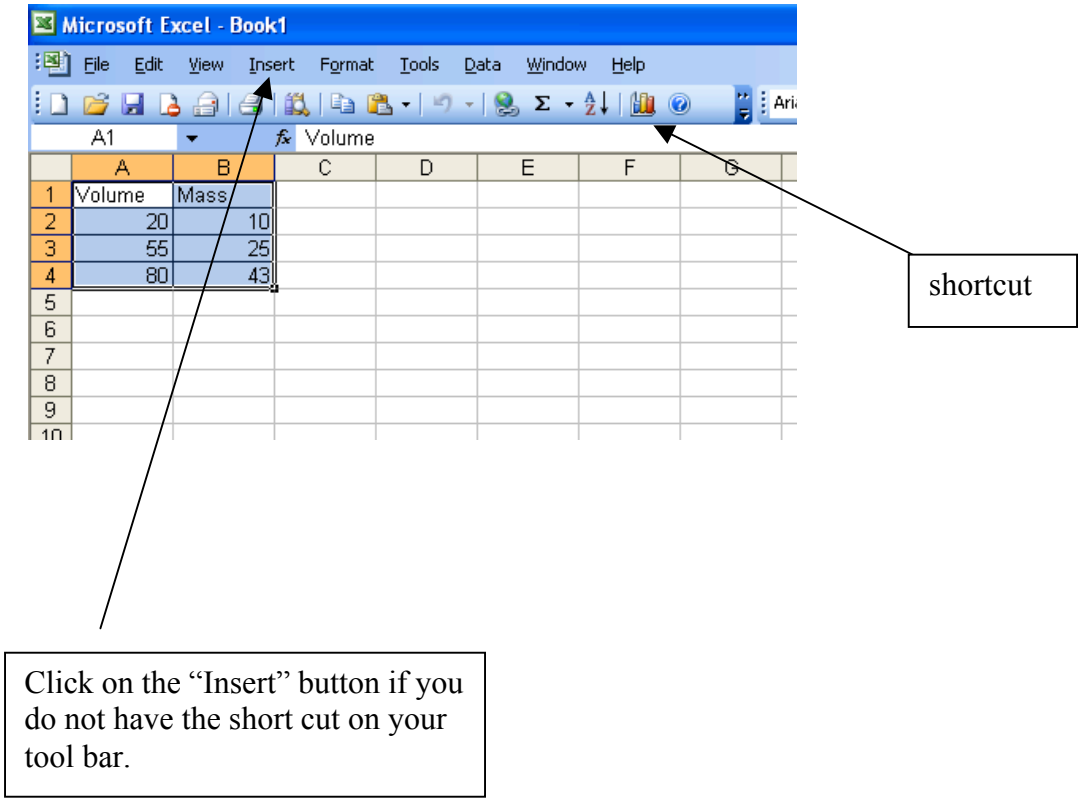
Graphing in Excel

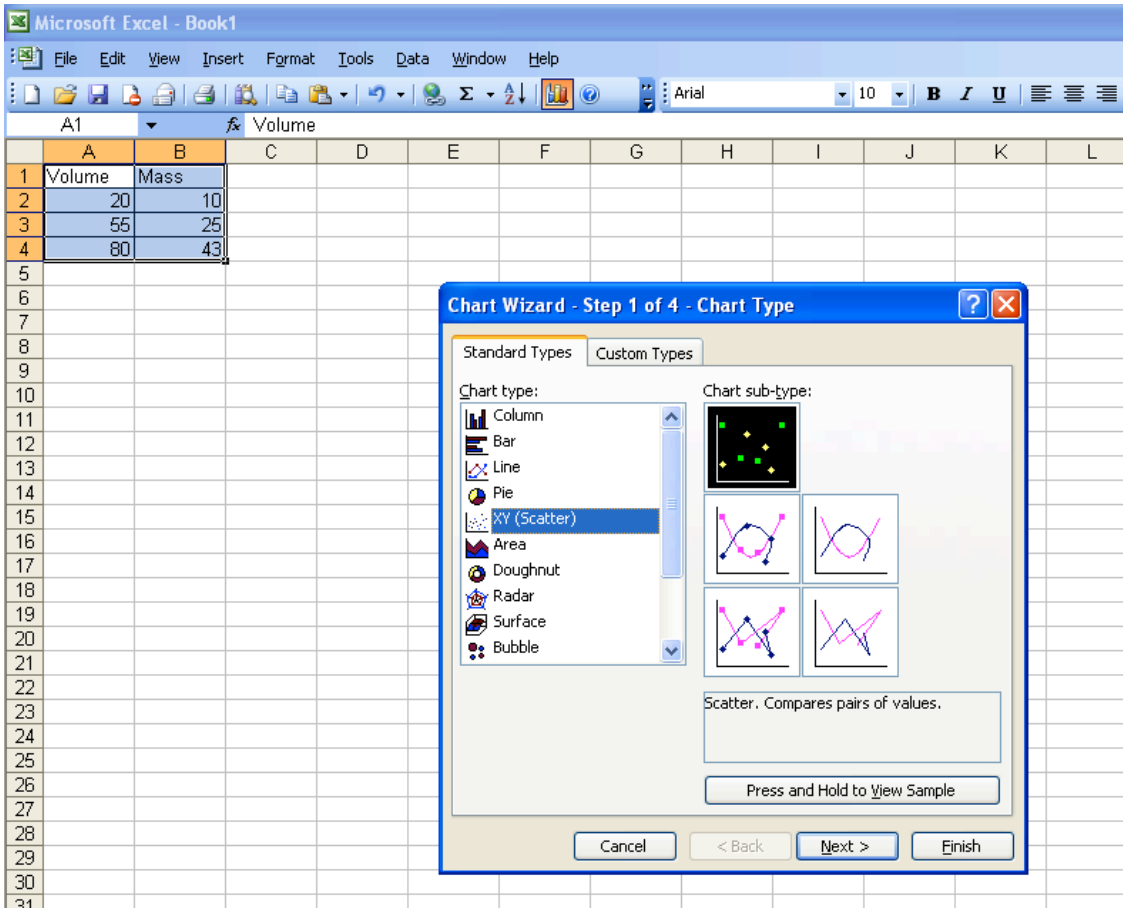
1. The excel program will automatically put the first column of data on the x-axis and the second column of data on the y-axis.

Volume	Mass
20	10
55	25
80	43

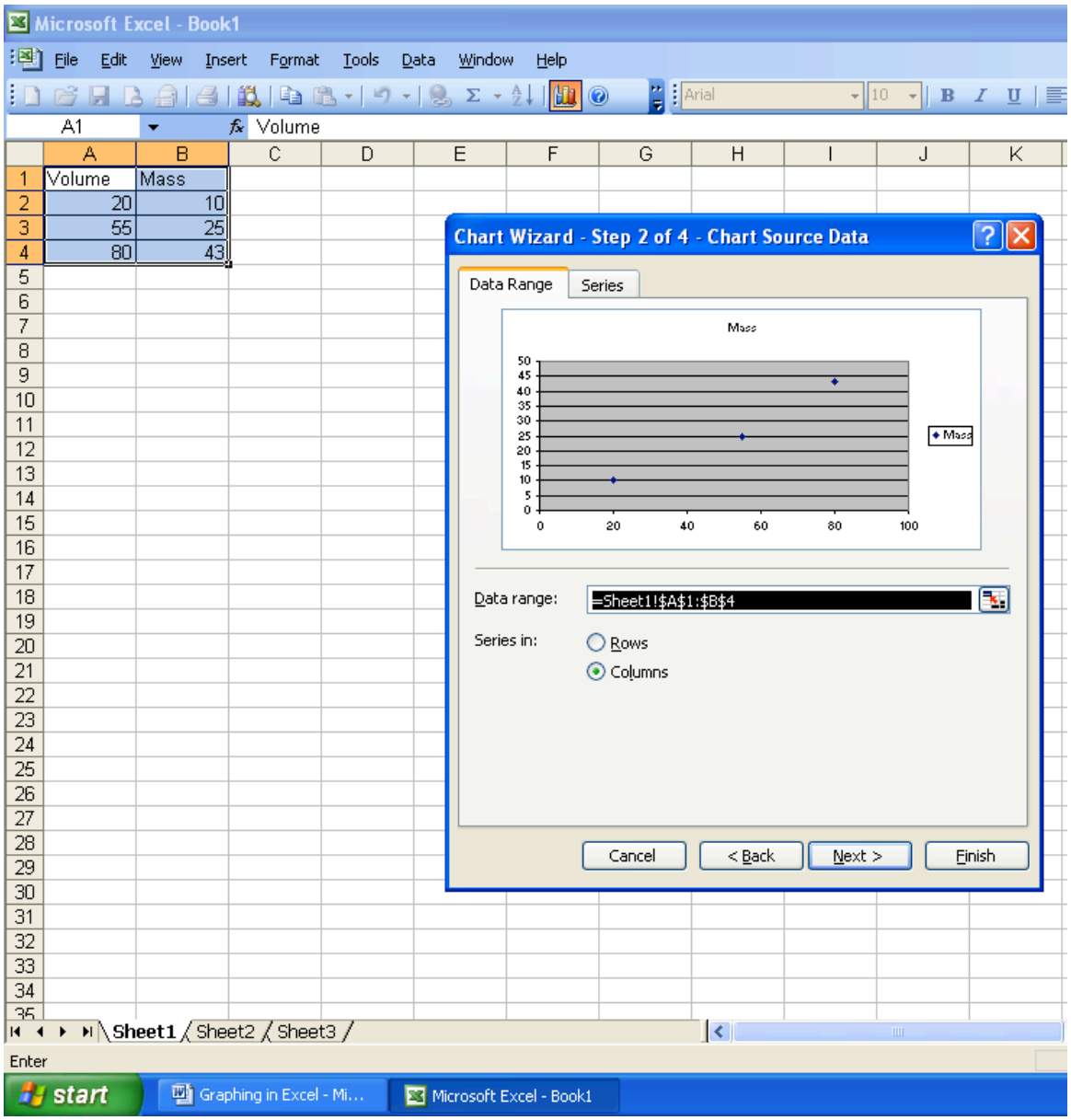
2. Highlight your data. Click on the shortcut "Chart" Tab OR click on "Insert" and scroll down to "Chart".



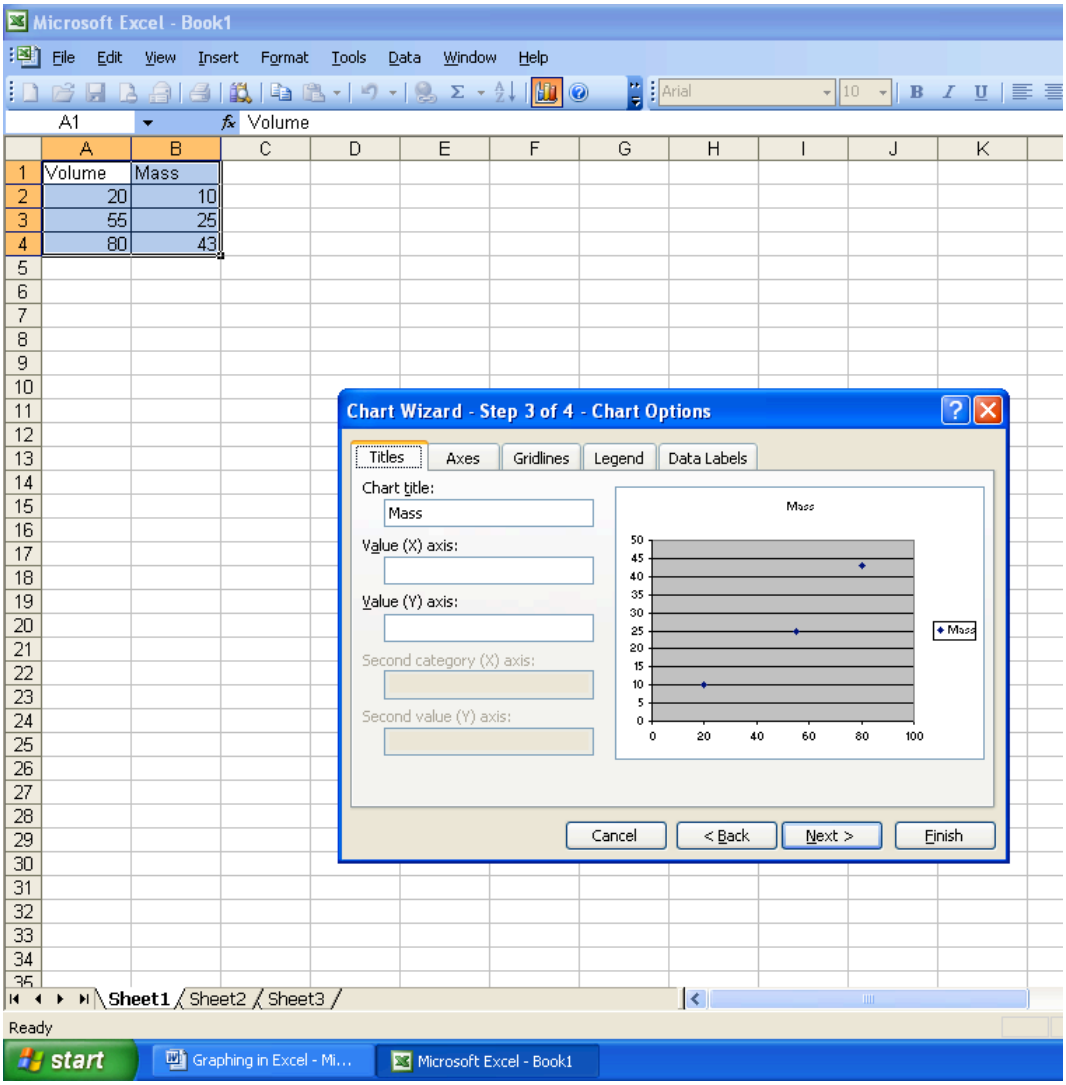
3. Select the “XY Scatter” then “Next”.

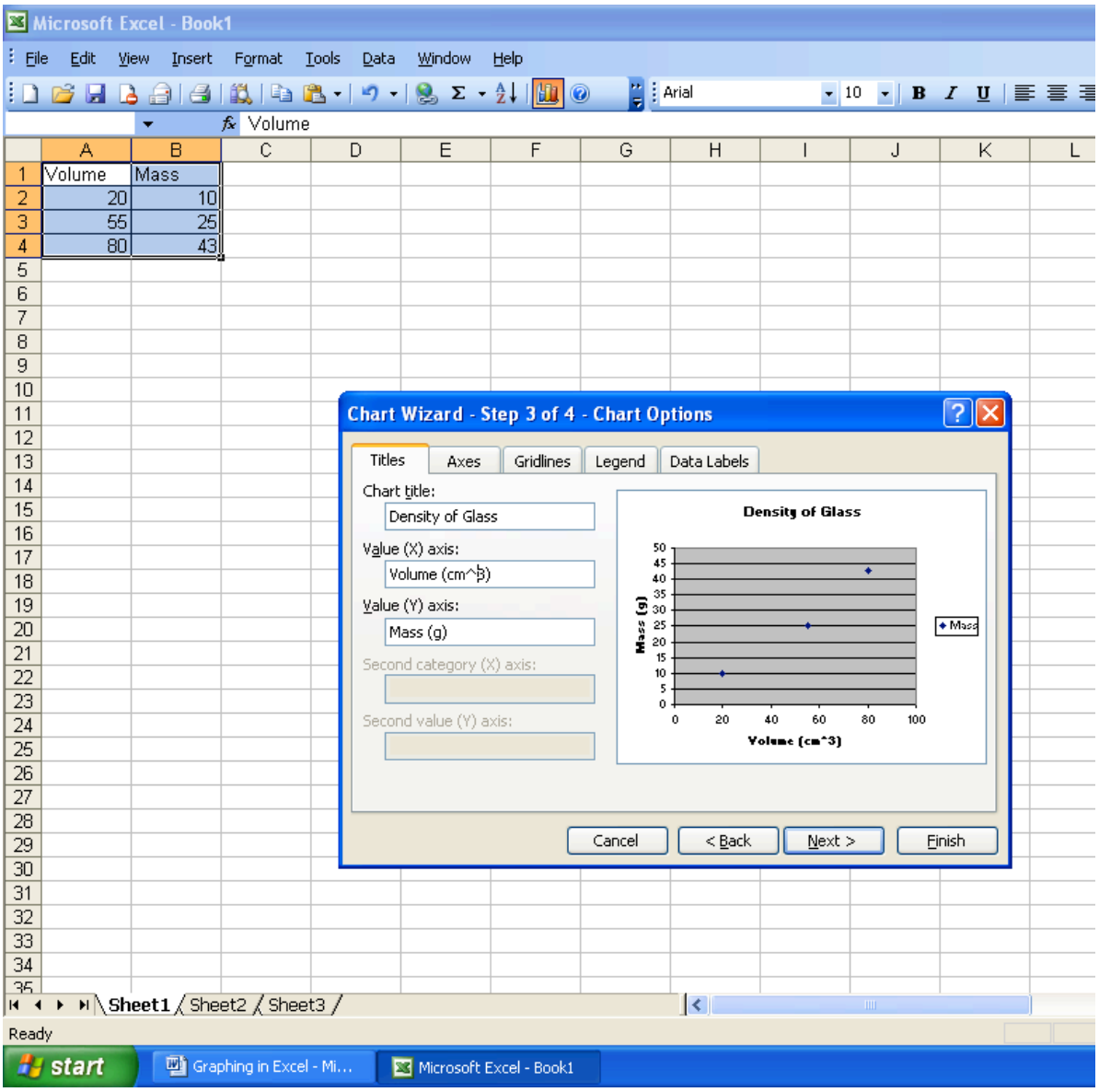


4. Click “Next” again to go past “Chart Data Source”.

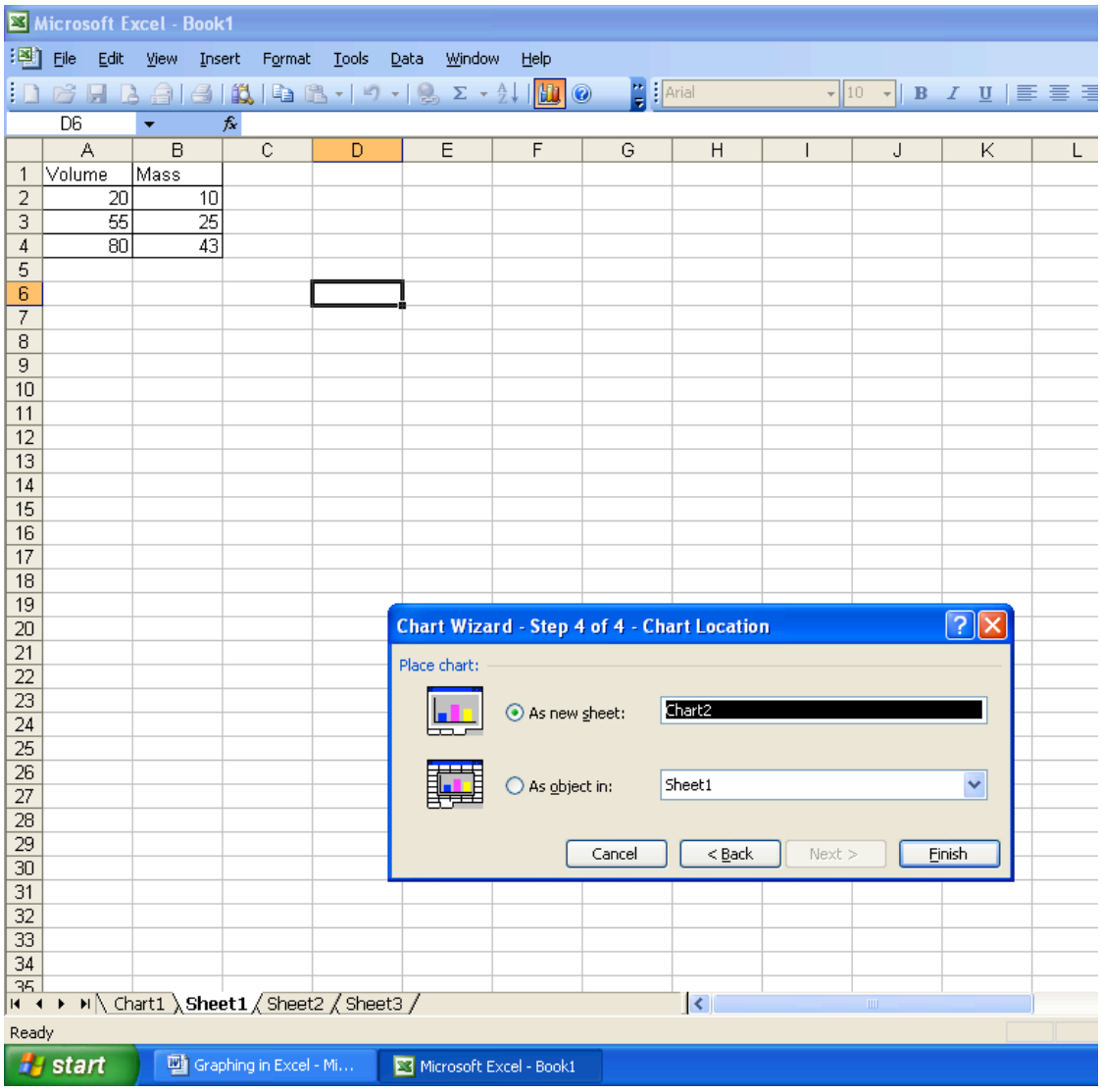


5. If the Title tab does not appear first click on that tab to fill in title, x-axis, and y-axis.

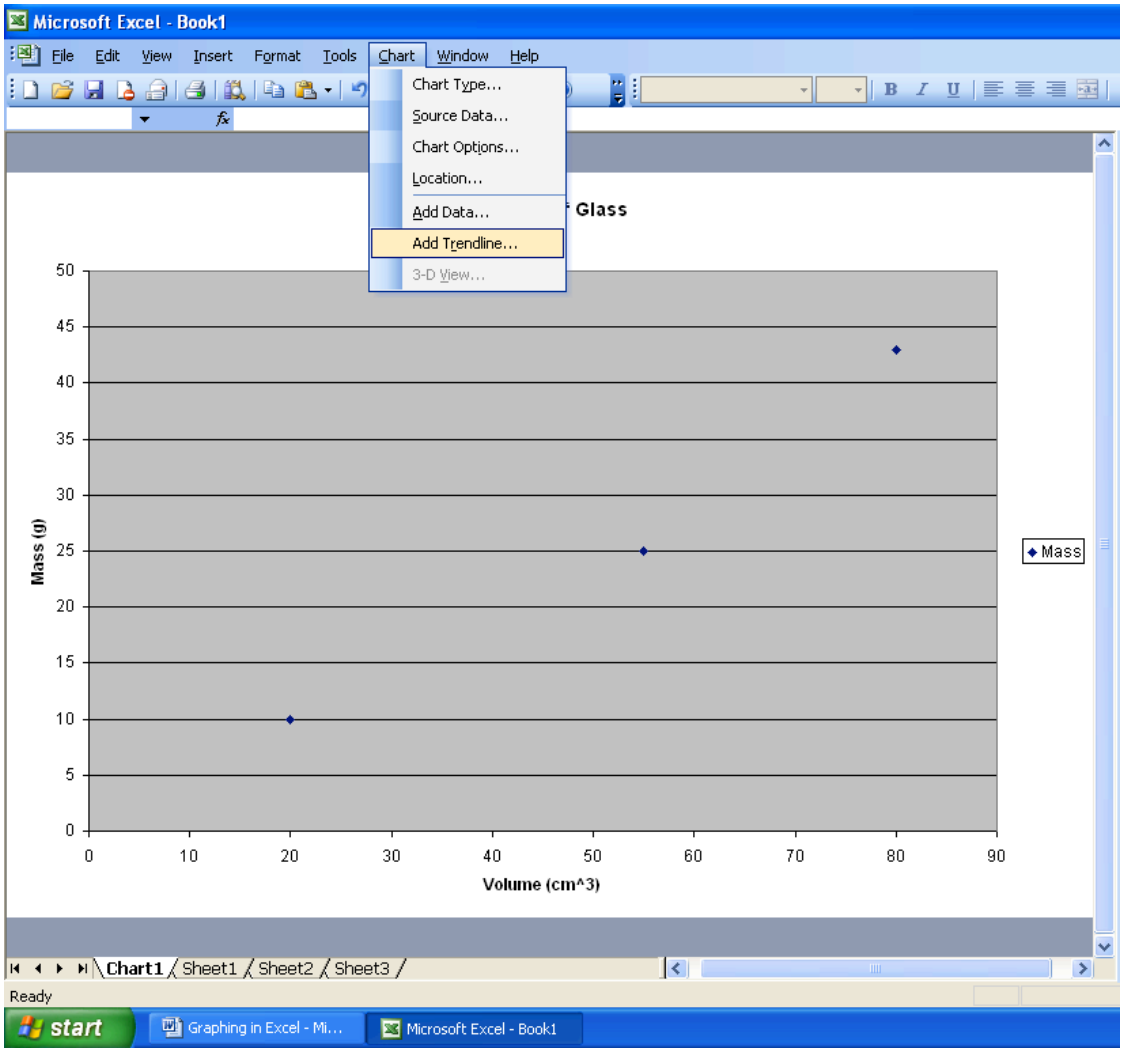



Microsoft Excel - Book1
File Edit View Insert Format Tools Data Window Help
Arial 10
Volume
Volume Mass
20 10
55 25
80 43
Chart Wizard - Step 3 of 4 - Chart Options
Titles Axes Gridlines Legend Data Labels
Chart title:
Density of Glass
Value (X) axis:
Volume (cm^3)
Value (Y) axis:
Mass (g)
Second category (X) axis:
Second value (Y) axis:
Density of Glass
Mass (g)
Volume (cm^3)
Mass
Cancel < Back Next > Finish
Sheet1 Sheet2 Sheet3
Ready
start
Graphing in Excel - Mi...
Microsoft Excel - Book1

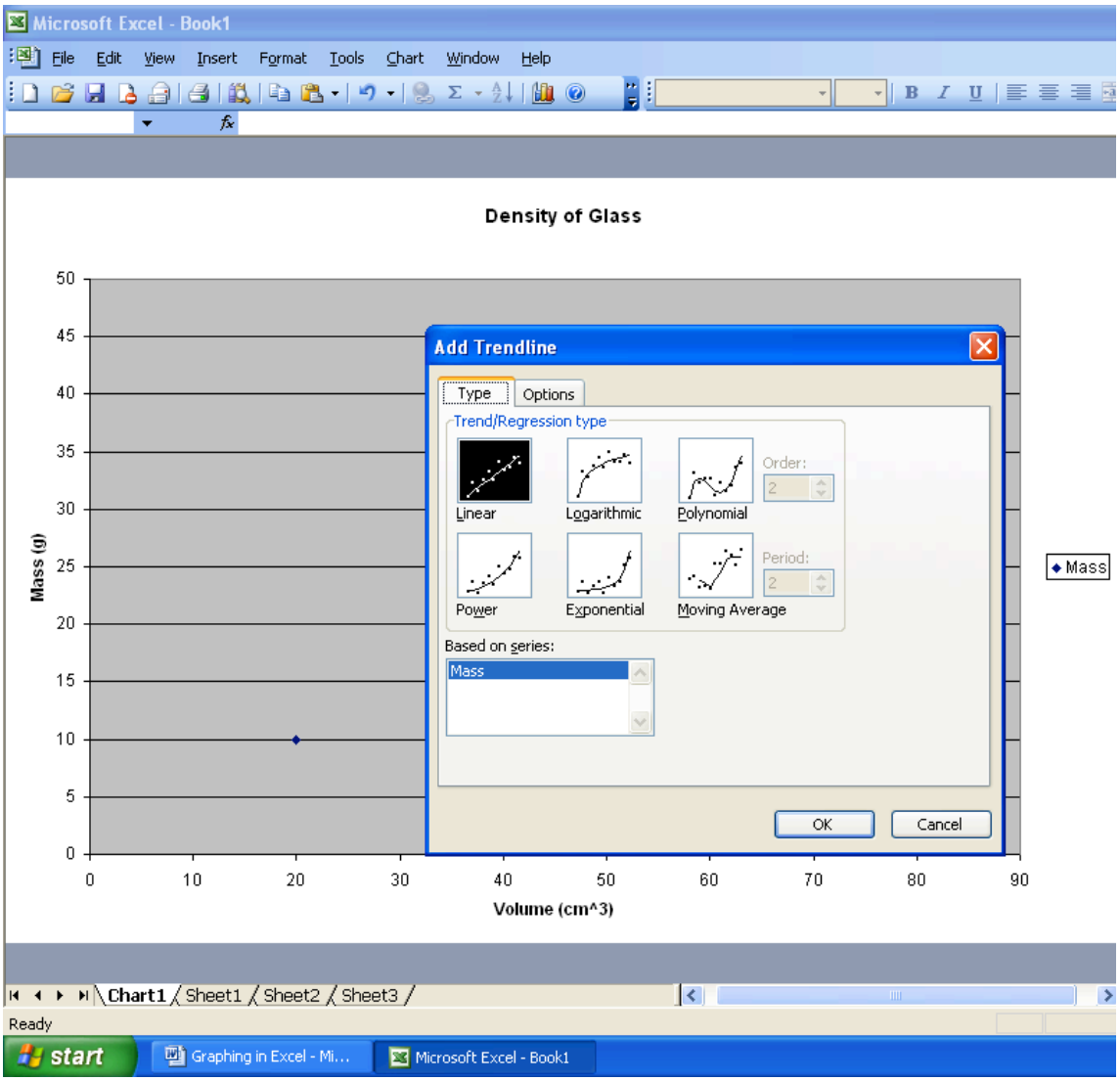
6. Select “As new Sheet”. Once your graph appears, move to the next step.



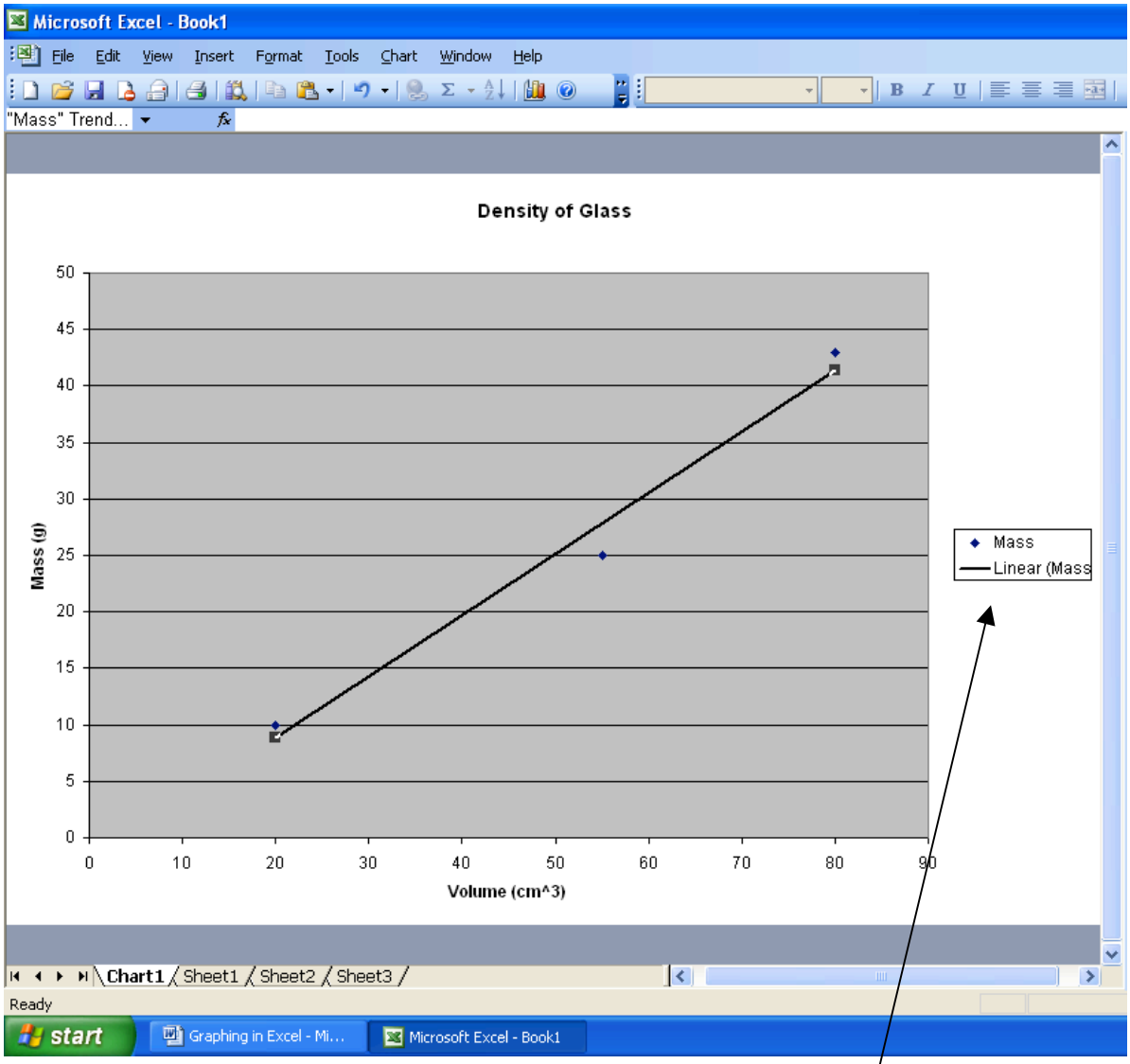
7. Click on “Chart” on the menu bar. Scroll down and select “Add Trendline”.



8. Select “Linear” then hit “OK”.



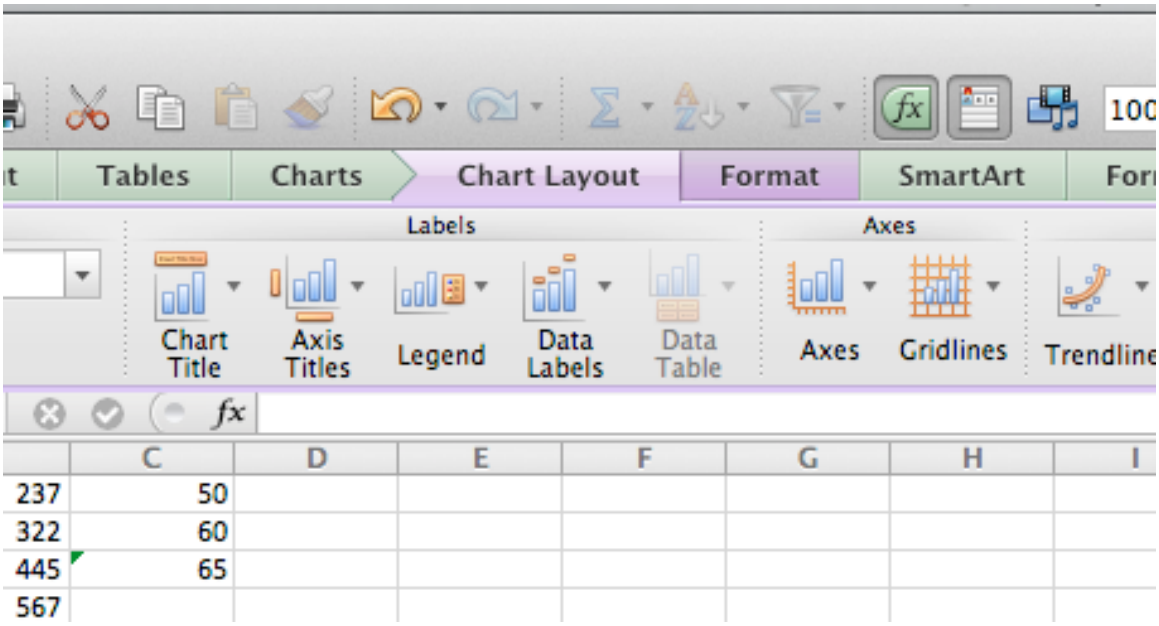
9. Once your final graph appears, you may need to delete the "Legend" box on the right side of the graph. Once you are satisfied, print the graph, make sure the graph makes sense, and attach the graph to your lab report.



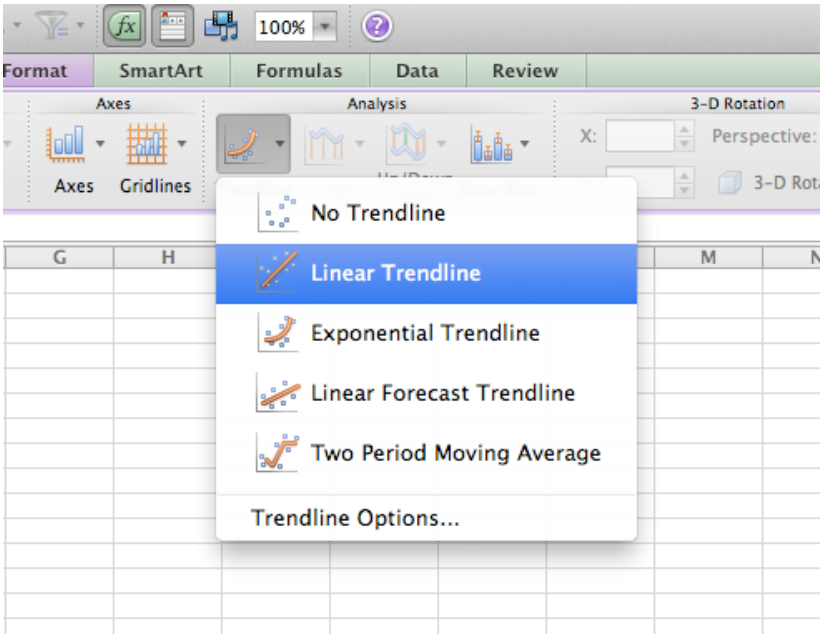
Click on this legend box and hit delete. You do not need this information for this type of graph

Instruction when using Mac – Applying equation and graphing.

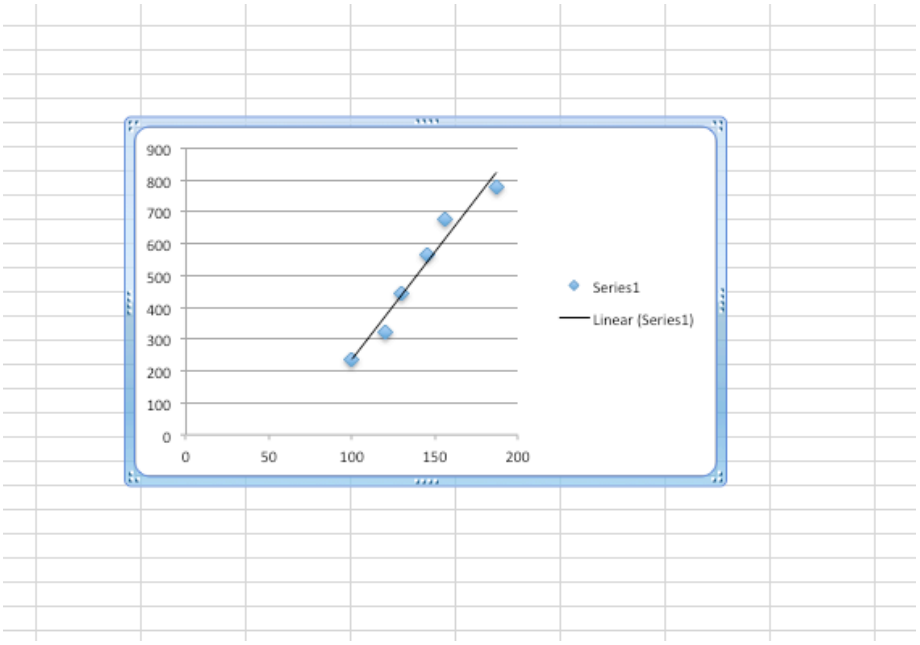
1. If your graph looks linear, click on chart layout.



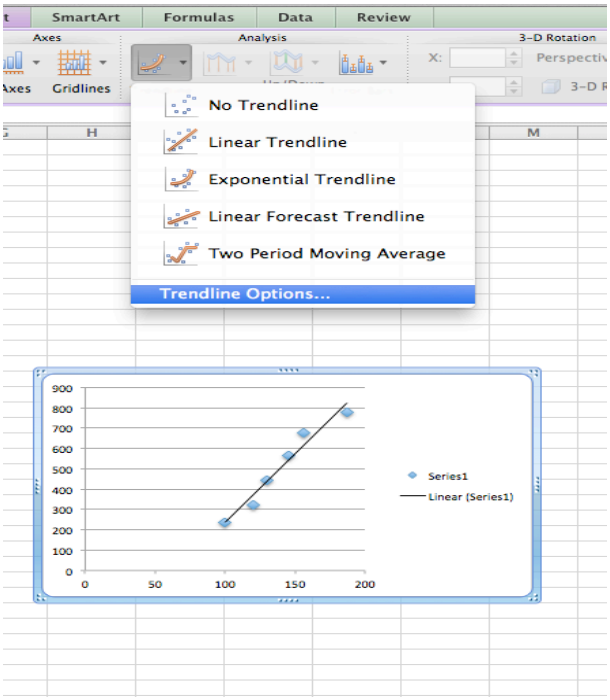
2. Then Select "Trendline" and select linear Trendline.

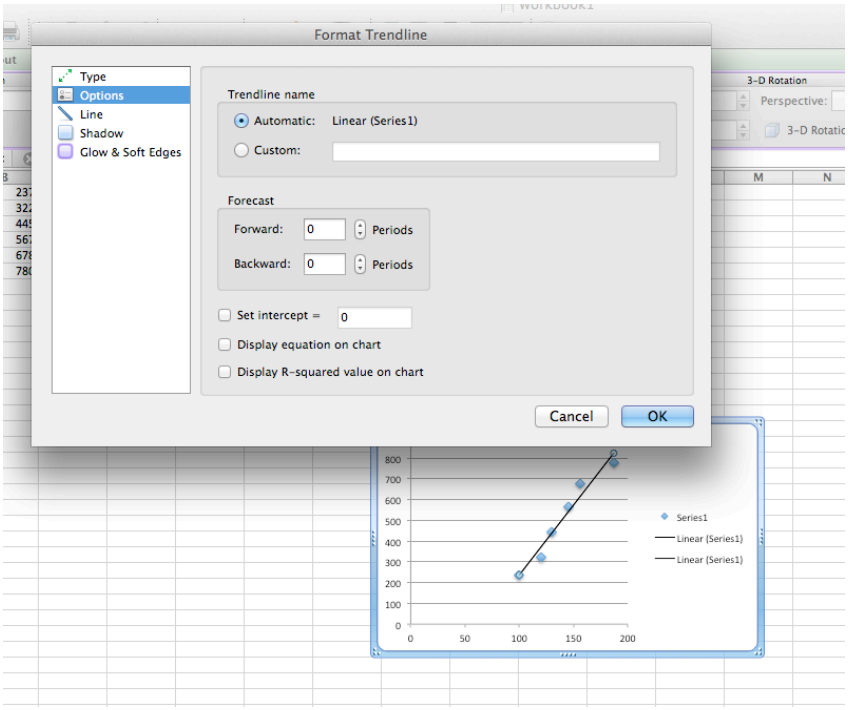


3.You get your linear graph as shown below.

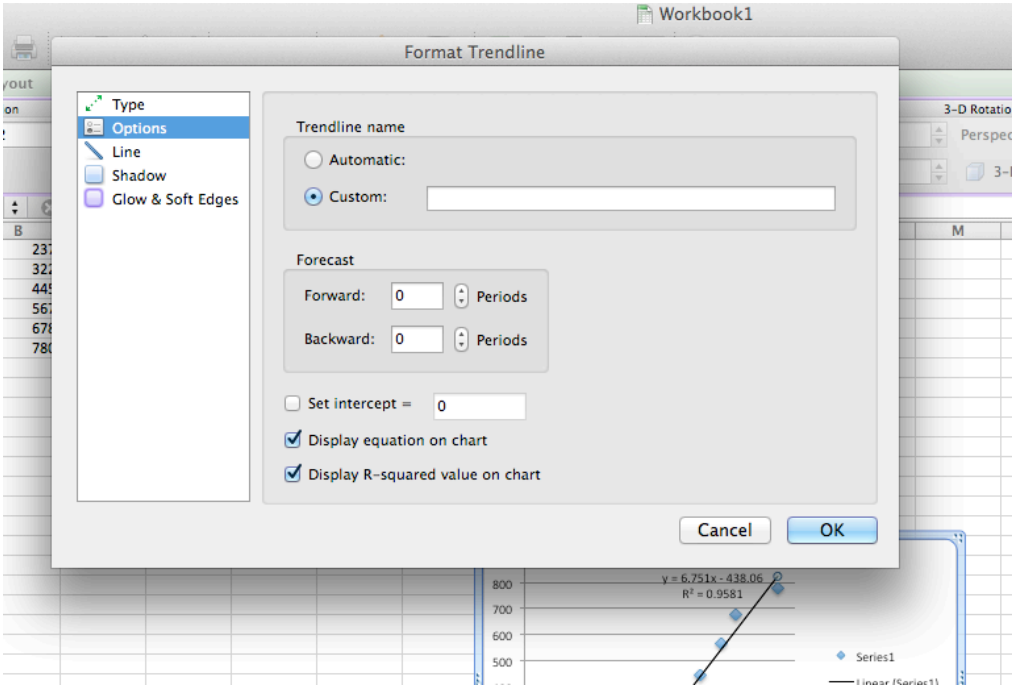


4. Then select the “Trendline” options and you get the following window.





5. Select Custom, Display equation on chart and Display R-squared value on chart.

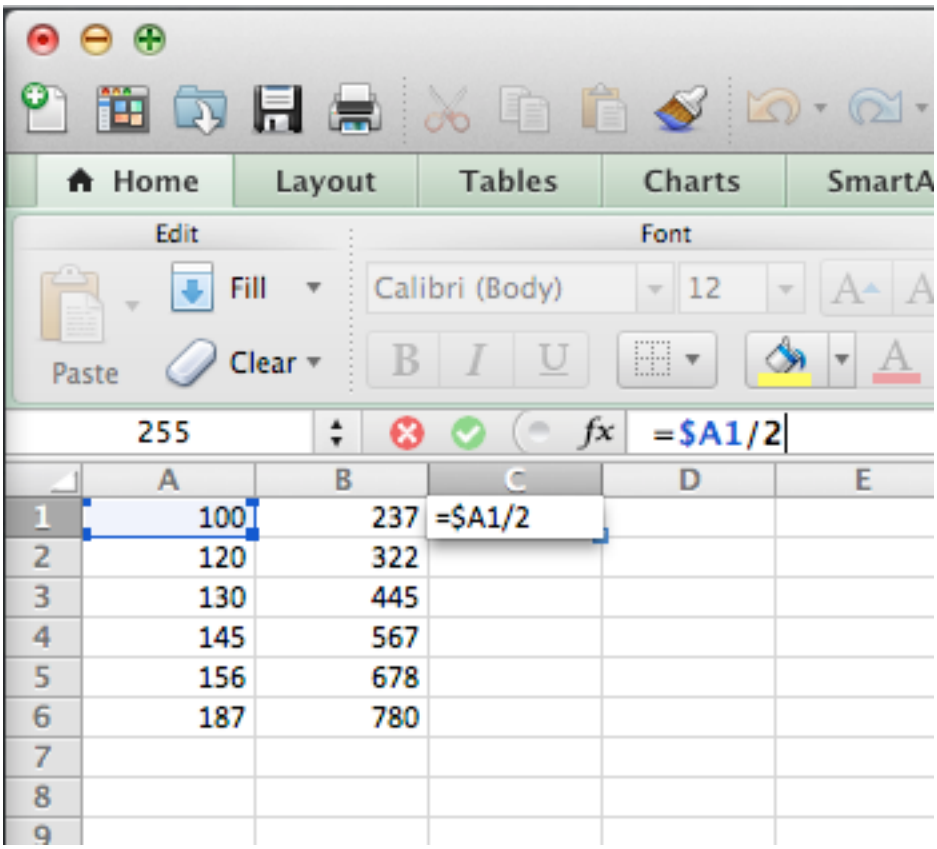


6. The equation is linear equation

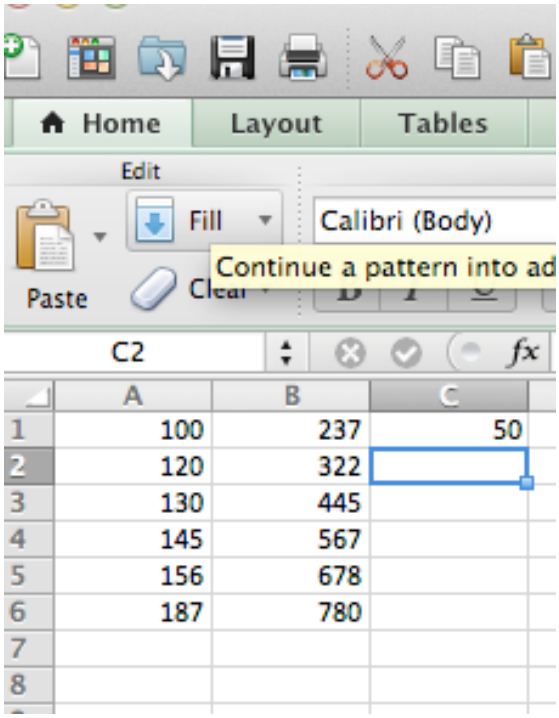
Y= mx + b Y is the concentration, X is the time and m is the slope indicative of how fast compound is dissolving. R is know nas the regression value the closes the value to number ‘1’ the better the linear fit. This is indicative of good data.

How to divide conductivity or TDS by the mass of the sample.

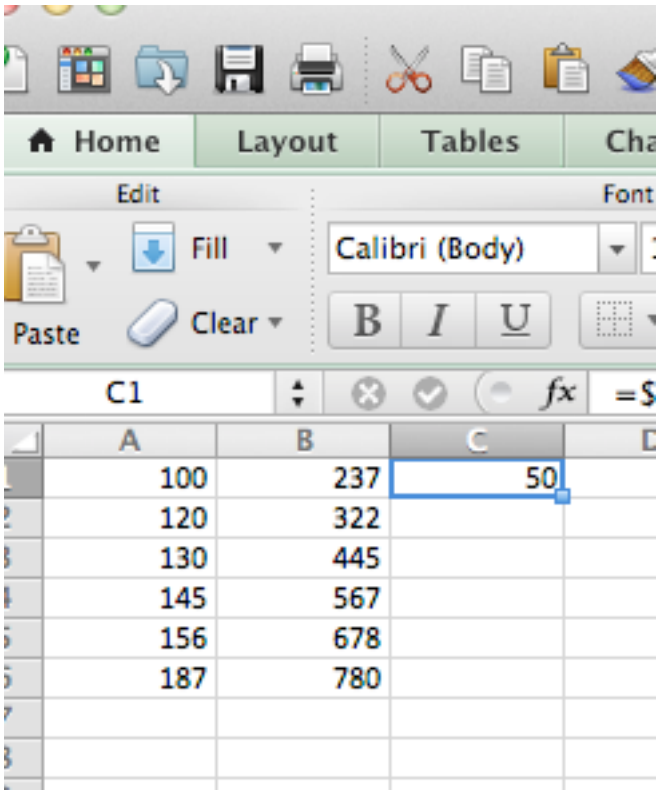
1. Place the cursor in the first cell of the new column that is going to be your result column. Then go to the formula bar and type in =$A1/2 and press enter.



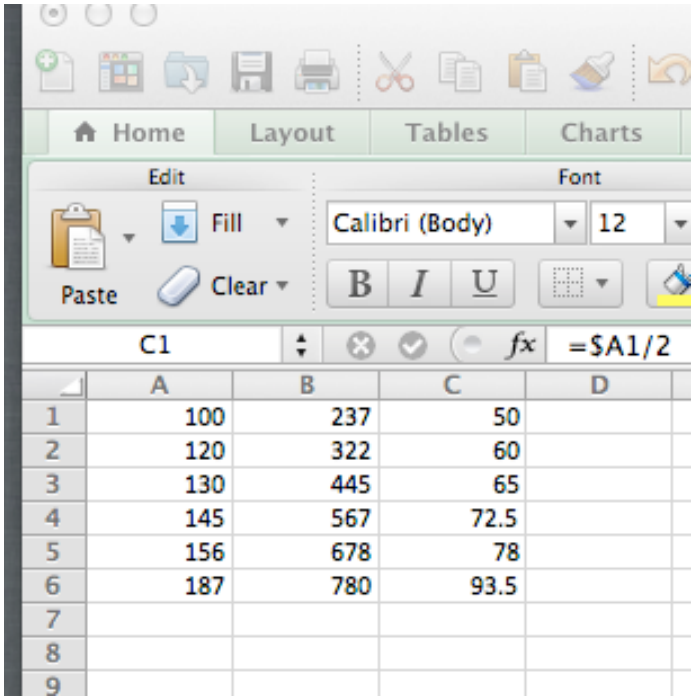
2. The following window is the result after you press Enter.



3. Then to repeat the same process to every single row, highlight the first cell.



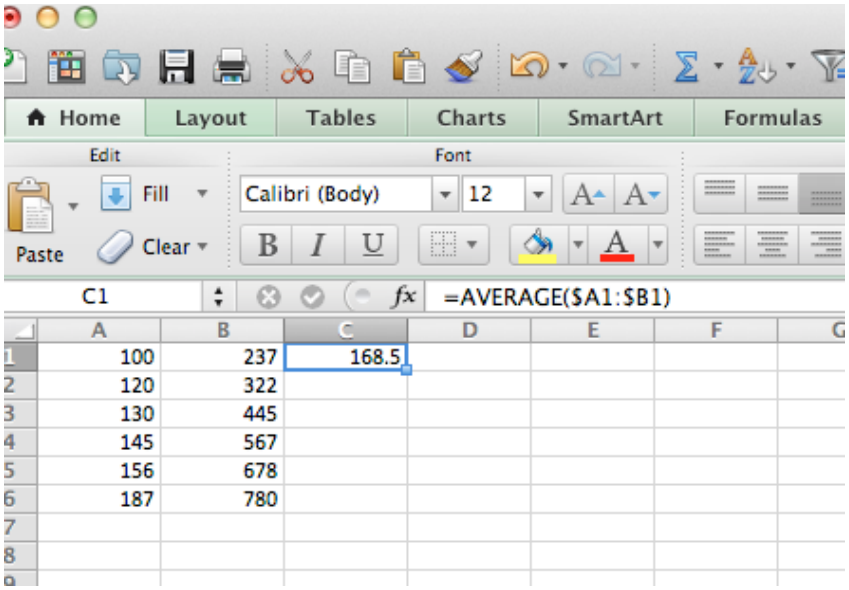
4. Place your cursor on the lowest right corner of the first cell and stretch it down to the end of the row that you want. When you release your cursor the new data is generated and each cell is filled with the result.



	A	B	C	D
1	100	237	50	
2	120	322	60	
3	130	445	65	
4	145	567	72.5	
5	156	678	78	
6	187	780	93.5	
7				
8				
9				

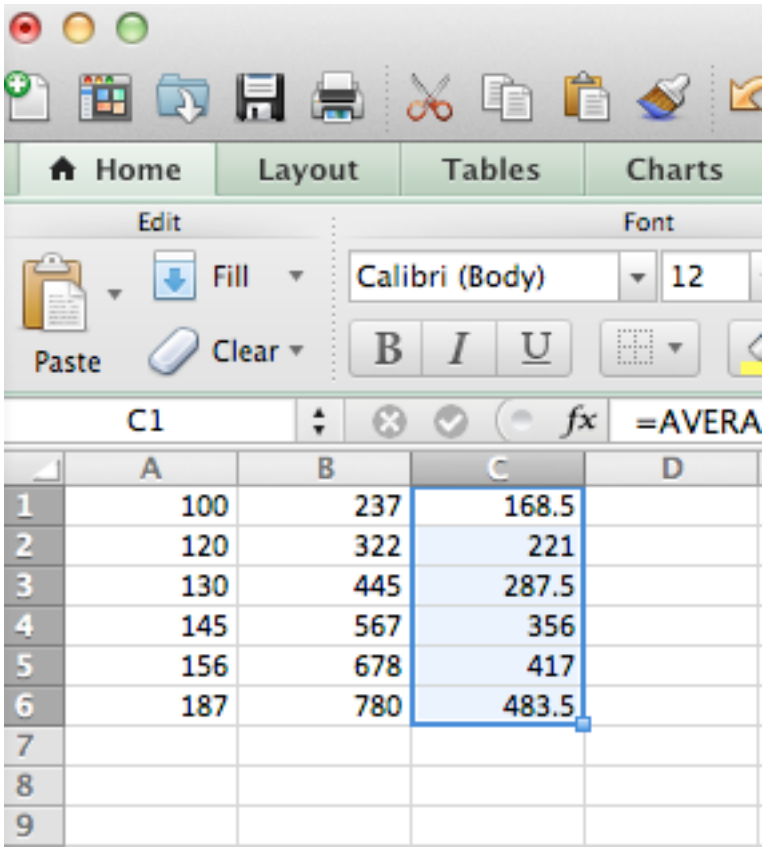
How to average the values of each row of two columns generating a new column.

1. When you want to average your concentration for two trials. Copy your data of the two trials into two columns. Then type in the formula bar =AVERAGE($A1,$B1) and press enter.



	A	B	C	D	E	F	G
1	100	237	168.5				
2	120	322					
3	130	445					
4	145	567					
5	156	678					
6	187	780					
7							
8							

2. Put your cursor at the lower right corner of the first cell and stretch it down and it copies the same operation to all the rows.



	A	B	C	D
1	100	237	168.5	
2	120	322	221	
3	130	445	287.5	
4	145	567	356	
5	156	678	417	
6	187	780	483.5	
7				
8				
9				