

Go to <http://lakemath.com>

Your teacher will tell you which dataset to choose.

Click on the number for your project.

On the **bottom** it will ask **if you want to open or save**, select **open**.

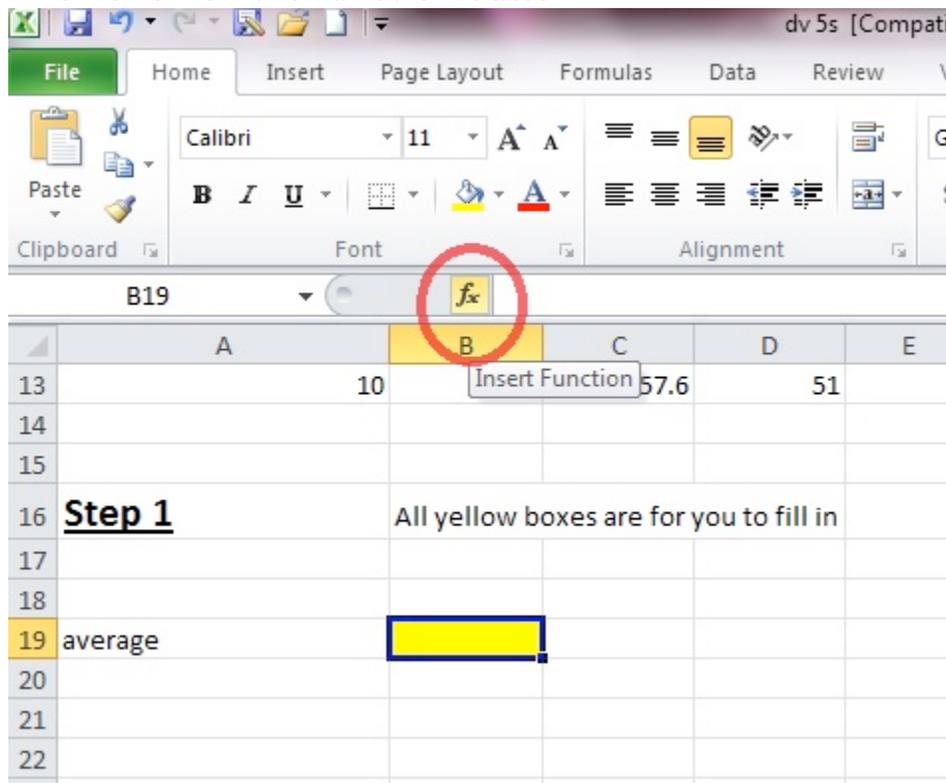
Step 1:

Go to step 1 in your Excel File

We will need to find the average price for your competition's goods and services.

Click on the yellow cell beside the word average

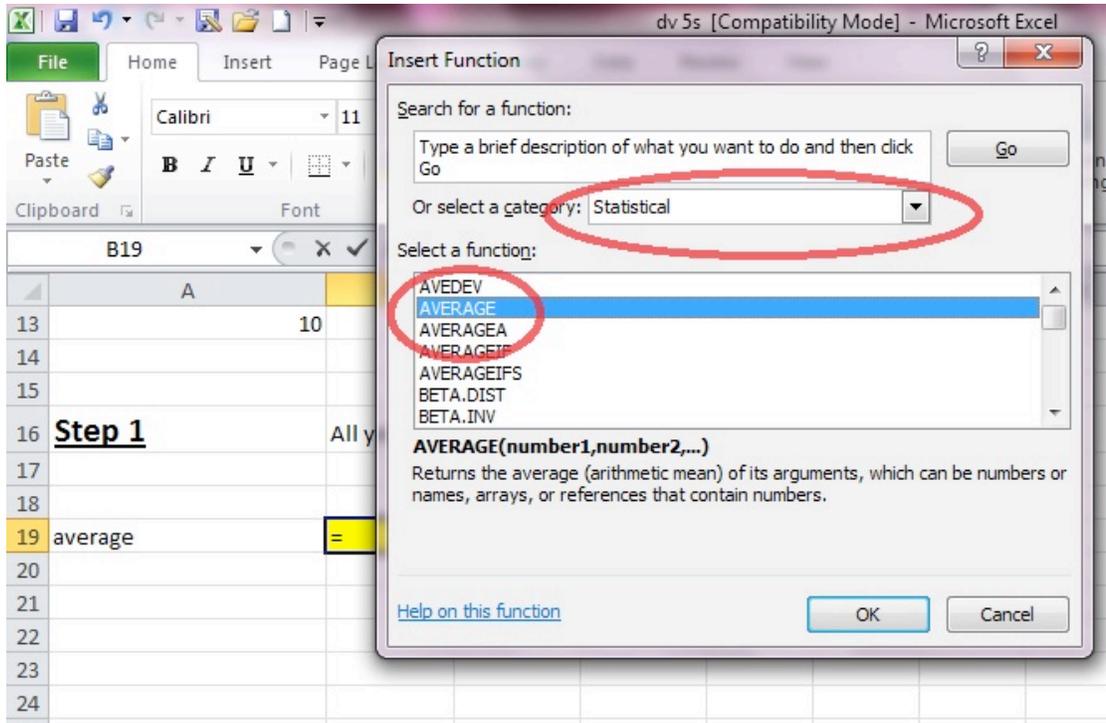
Then click on the function button



Step 1 continued:

A box will pop up

For category, select statistical and select average



Click OK

A new box pops up

Click on the box with an arrow

Function Arguments

AVERAGE

Number1: B3:B18 = {0;5.3;10.6;15.9;21.2;26.5;31.8;37.1;42.4;47.7;53}

Number2: = number

= 26.5

Returns the average (arithmetic mean) of its arguments, which can be numbers or names, arrays, or references that contain numbers.

Number1: number1,number2,... are 1 to 255 numeric arguments for which you want the average.

Formula result = 26.5

Help on this function

OK Cancel

Step 1 All yellow boxes are for you to fill in

Here you will select your data

Function Arguments

B3:D13

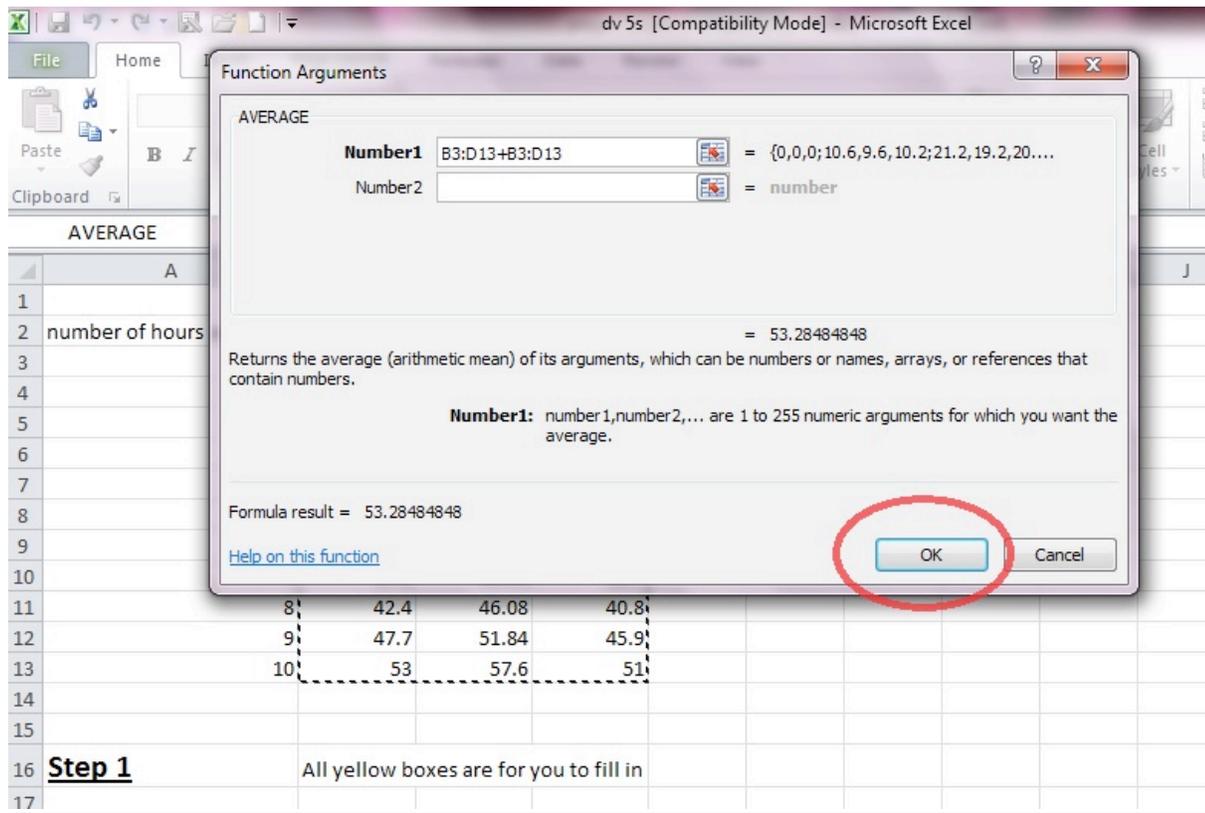
Then Click on That

First Highlight Prices

Step 1 All yellow boxes are for you to fill in

	Company A	Company B	Company C
0	0	0	0
1	5.3	4.8	5.1
2	10.6	9.6	10.2
3	15.9	14.4	15.3
4	21.2	19.2	20.4
5	26.5	28.8	25.5
6	31.8	34.56	30.6
7	37.1	40.32	35.7
8	42.4	46.08	40.8
9	47.7	51.84	45.9
10	53	57.6	51
average			

Then click **OK**



Step 2:

Now we need to find the equations for the company prices.

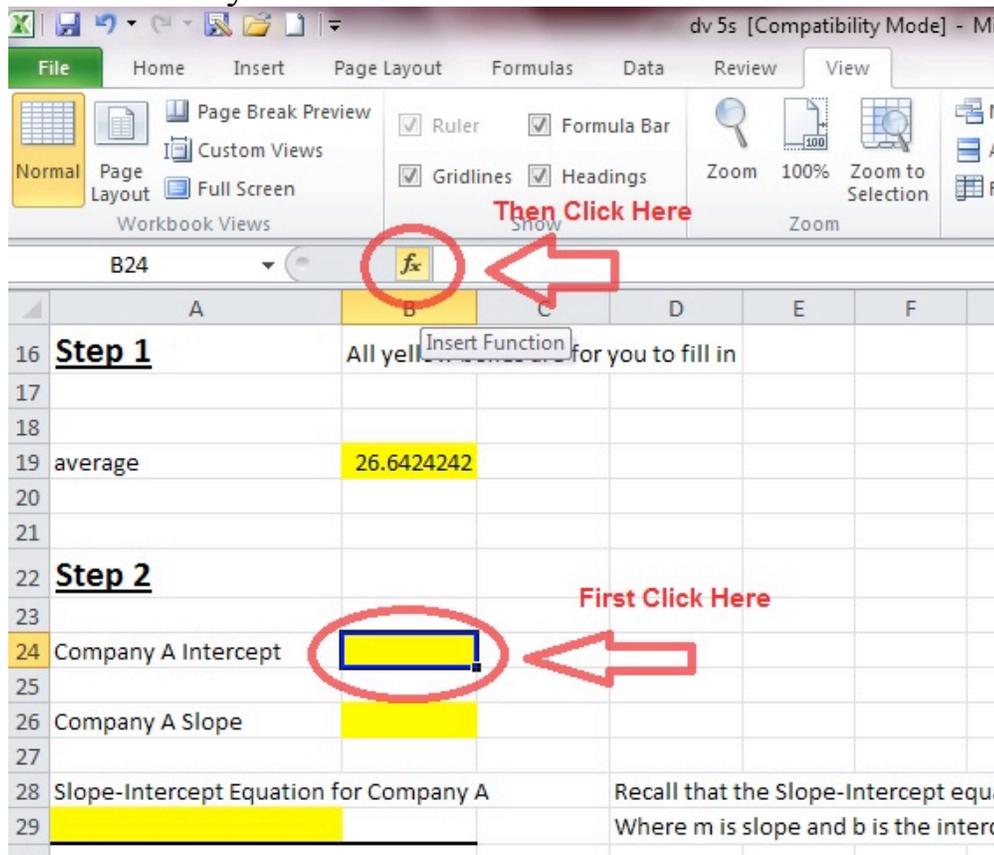
The Slope-Intercept Equation is $y=mx+b$

m is the **slope**

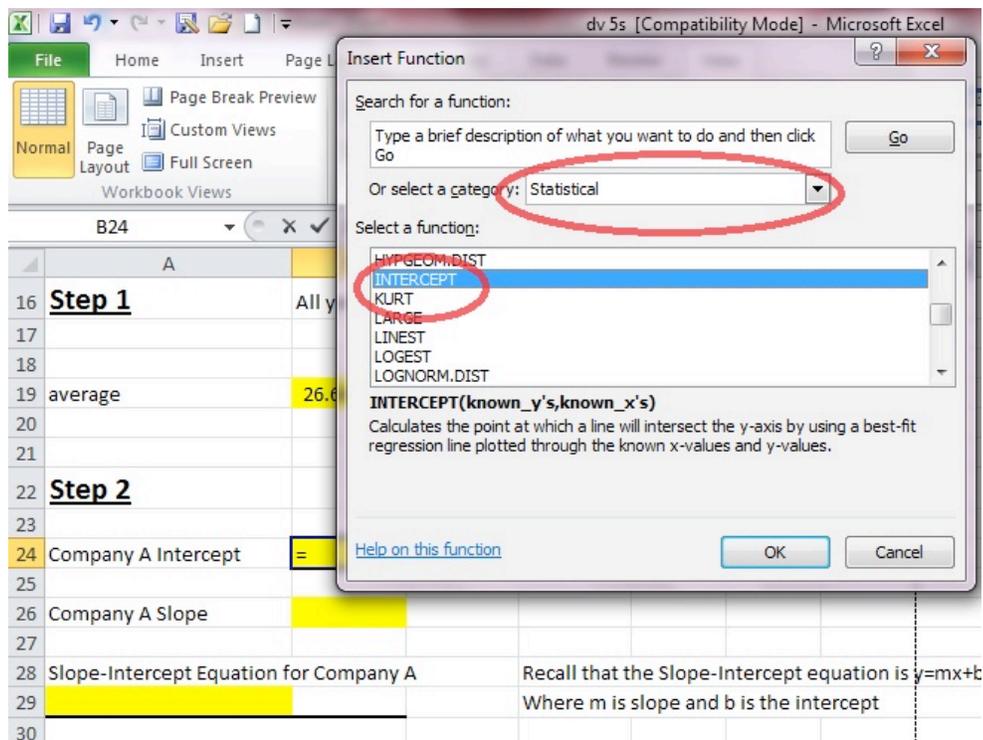
b is the **y-intercept**

Each company will have their own equation.

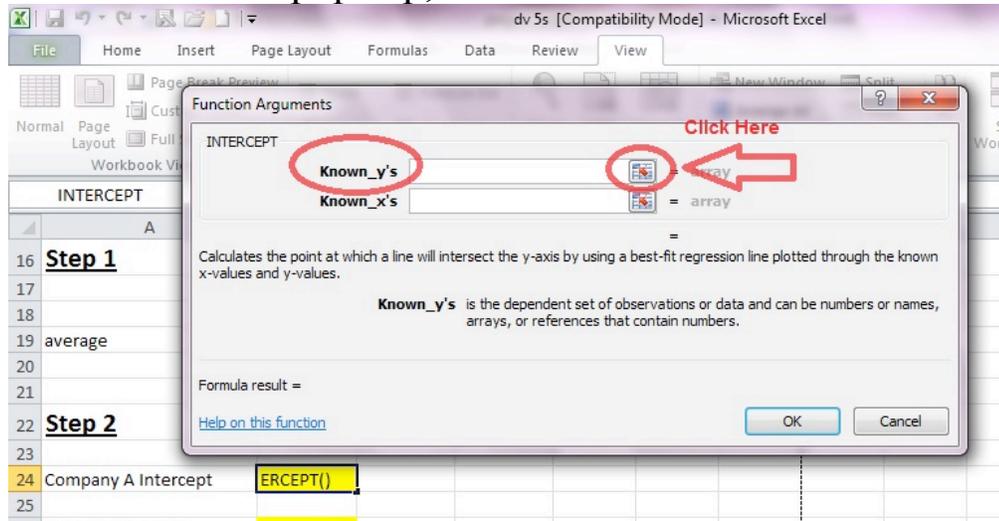
In Excel, where it says **Company A Intercept**, there is a yellow box. Click on the yellow box



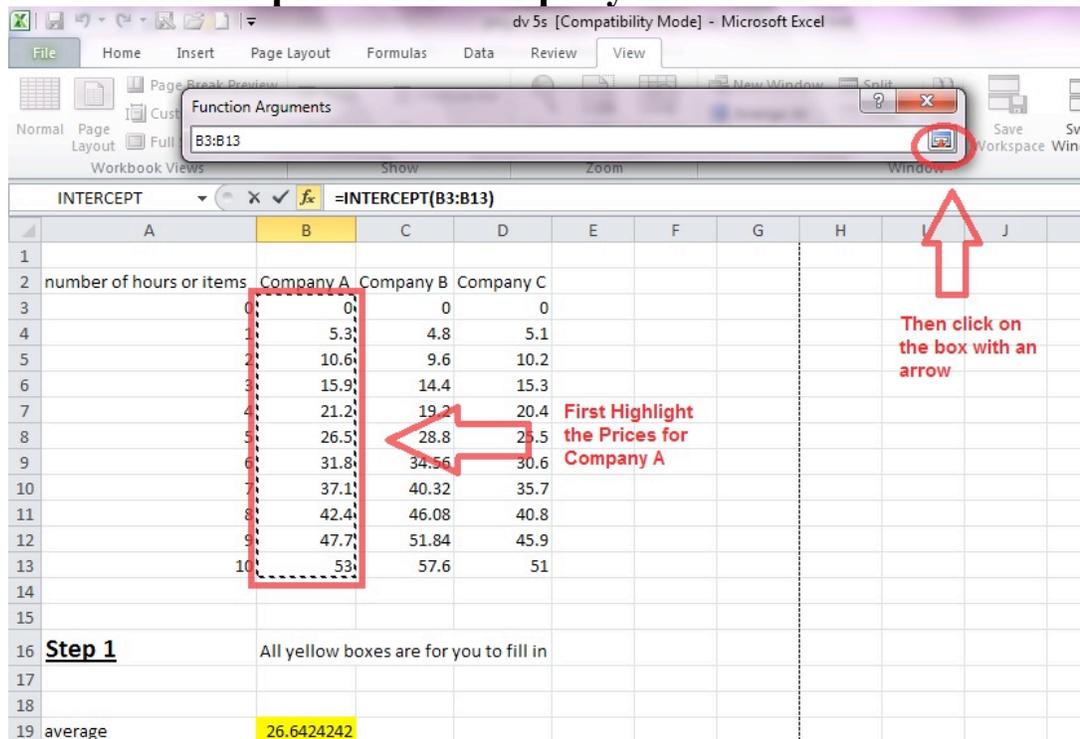
Then make sure the **category** still says **statistical** and highlight **intercept**. Then click **OK**.



Then a new box pops up, click on the box with an arrow for the y values



Now select the **prices** for **Company A**.



Now we have to select the **x values**.

Function Arguments
A3:A13

INTERCEPT $=\text{INTERCEPT}(B3:B13+B3:B13,A3:A13)$

	A	B	C	D	E	F	G	H
1								
2	number of hours or items	Company A	Company B	Company C				
3	0	0	0	0				
4	1	5.3	4.8	5.1				
5	2	10.6	9.6	10.2				
6	3	15.9	14.4	15.3				
7	4	21.2	19.2	20.4				
8	5	26.5	28.8	25.5				
9	6	31.8	34.56	30.6				
10	7	37.1	40.32	35.7				
11	8	42.4	46.08	40.8				
12	9	47.7	51.84	45.9				
13	10	53	57.6	51				
14								
15								
16	Step 1	All yellow boxes are for you to fill in						

Then Click **OK**.

Now we need to find the **slope**

Click on the yellow box beside where it says **Company A Slope**

Then click on the function button

B26 fx

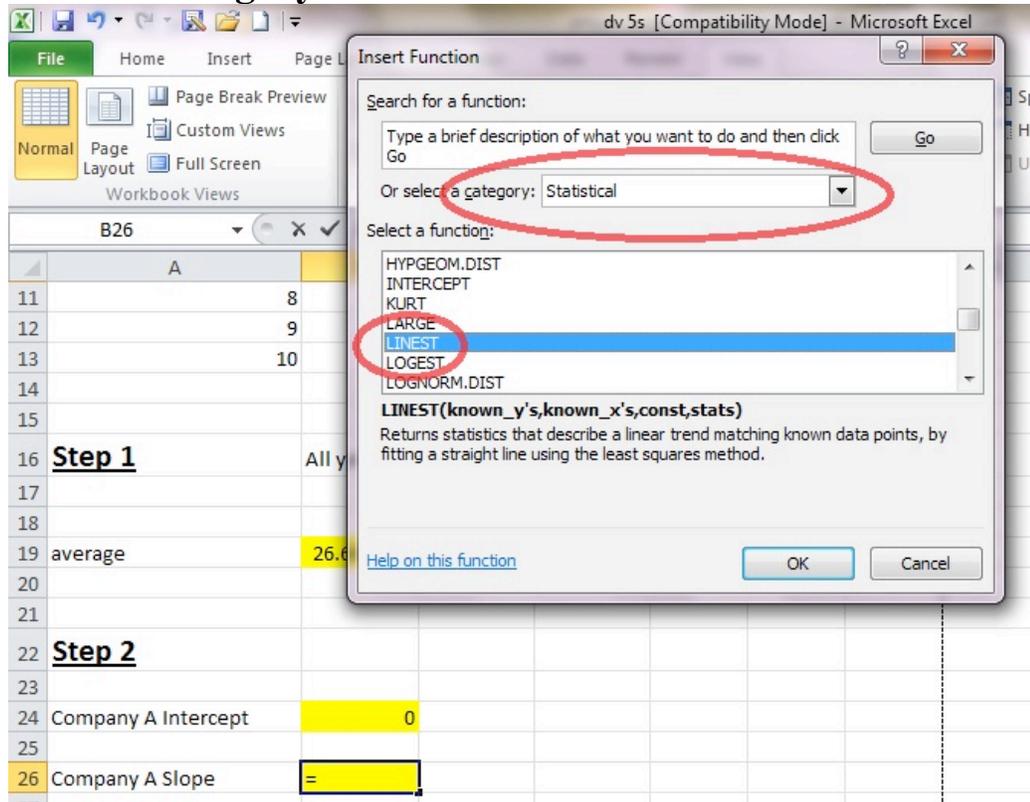
11	8	Insert Function	16.08	40.8				
12	9	47.7	51.84	45.9				
13	10	53	57.6	51				
14								
15								
16	Step 1	All yellow boxes are for you to fill in						
17								
18								
19	average	26.6424242						
20								
21								
22	Step 2							
23								
24	Company A Intercept	0						
25								
26	Company A Slope							
27								
28	Slope-Intercept Equation for Company A							
29								
30								
31								

Then click here

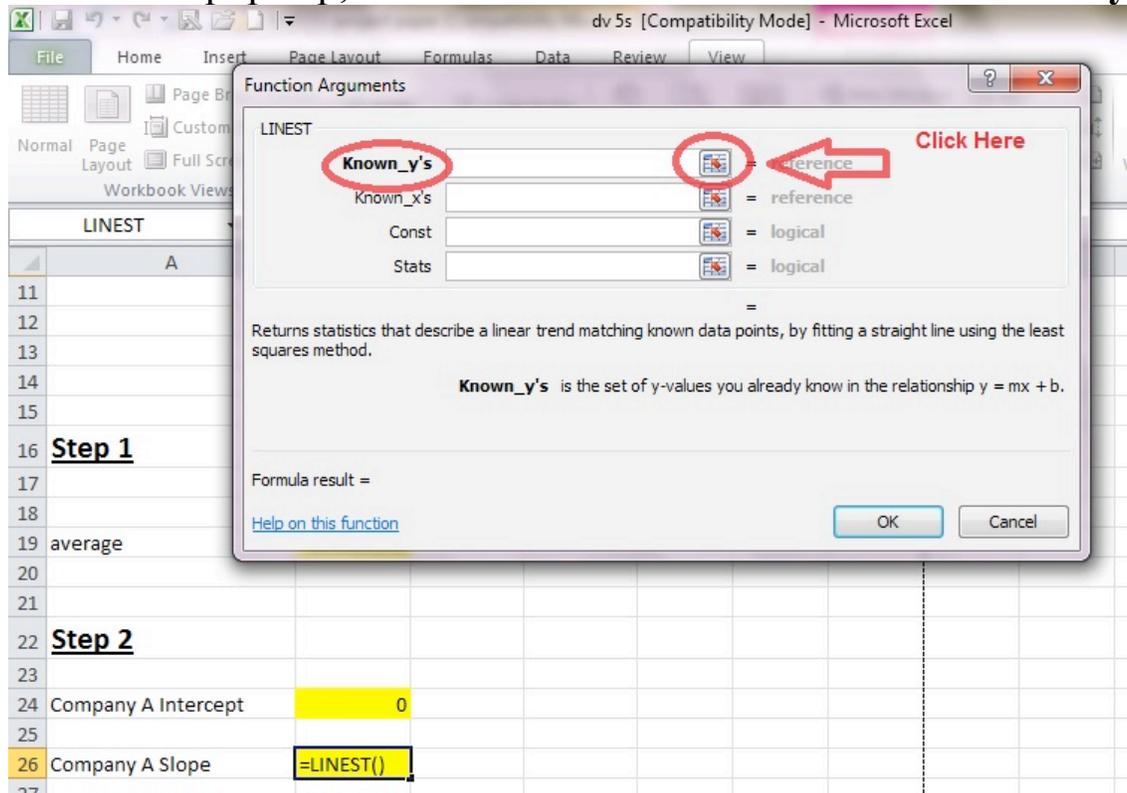
First Click Here

Recall that the Slope-Intercept equation is $y=mx+b$
Where m is slope and b is the intercept

Now for **category** select **statistical** and **linest**.



A new box pops up, **click on the box with an arrow for known y's**.



Now **highlight** the **prices** for **Company A** and click the **box** with an **arrow**.

The screenshot shows the Microsoft Excel interface with the 'Function Arguments' dialog box open for the LINEST function. The dialog box shows the 'Known_y's' argument as 'B3:B13'. In the background spreadsheet, the data for Company A (column B, rows 3-13) is highlighted with a red dashed box. A red arrow points from the text 'Then click here' to the selection icon in the dialog box. Another red arrow points from the text 'First Highlight the Prices for Company A' to the highlighted data range in the spreadsheet.

	A	B	C	D	E	F	G	H
1								
2	number of hours or items	Company A	Company B	Company C				
3		0	0	0				
4		1	5.3	4.8	5.1			
5		2	10.6	9.6	10.2			
6		3	15.9	14.4	15.3			
7		4	21.2	19.2	20.4			
8		5	26.5	28.8	25.5			
9		6	31.8	34.56	30.6			
10		7	37.1	40.32	35.7			
11		8	42.4	46.08	40.8			
12		9	47.7	51.84	45.9			
13		10	53	57.6	51			

Step 1 All yellow boxes are for you to fill in

Now we have to **select** the **x** values.

Click on the **box** with an **arrow** for **known x's**.

The screenshot shows the 'Function Arguments' dialog box for the LINEST function. The 'Known_y's' argument is 'B3:B13+B3:B13'. The 'Known_x's' argument is empty and circled in red. A red arrow points from the text 'Click Here' to the selection icon for the 'Known_x's' argument. The dialog box also shows the 'Const' and 'Stats' arguments, both set to 'logical'. The formula result is shown as '10.6'.

Function Arguments

LINEST

Known_y's: B3:B13+B3:B13 = {0;10.6;21.2;31.8;42.4;53;63.6;74...}

Known_x's: = { } **Click Here**

Const: = logical

Stats: = logical

Formula result = 10.6

Help on this function

OK Cancel

Then **highlight** the x values and **click** on the **box with an arrow**.

The screenshot shows the Microsoft Excel interface with the 'Function Arguments' dialog box open for the LINEST function. The dialog box displays the range 'A3:A13'. A red box highlights the x values in the table, and a red arrow points to a button in the dialog box.

	A	B	C	D	E	F	G	H	I
1									
2	number of hours or items	Company A	Company B	Company C					
3	0	0	0	0					
4	1	5.3	4.8	5.1					
5	2	10.6	9.6	10.2					
6	3	15.9	4.4	15.3					
7	4	21.2	19.2	20.4					
8	5	26.5	28.8	25.5					
9	6	31.8	34.56	30.6					
10	7	37.1	40.32	35.7					
11	8	42.4	46.08	40.8					
12	9	47.7	51.84	45.9					
13	10	53	57.6	51					
14									

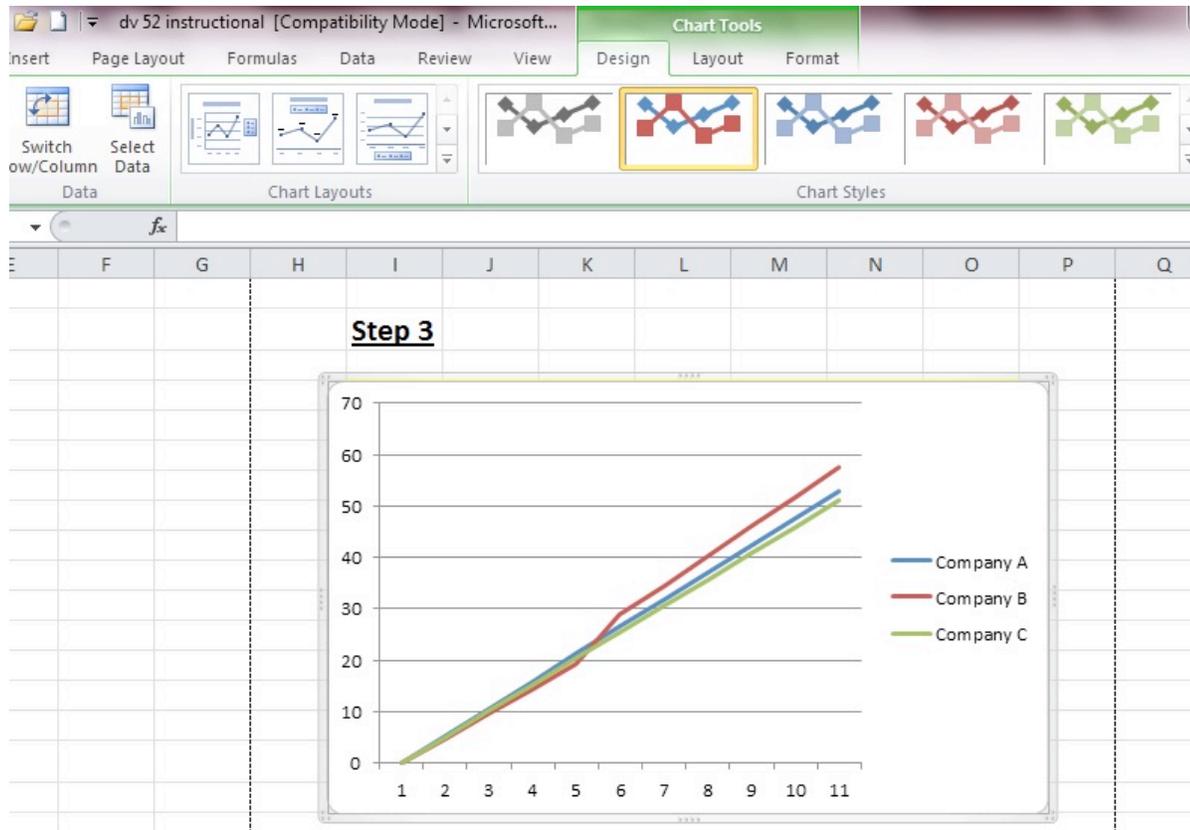
Now you have the slope and the y-intercept for Company A.

Now click on the yellow box under Slope-Intercept Equation for Company A and enter the equation.

For Company B and Company C, go back to the **beginning of Step 2** in order to get the y-intercept, slope, and y-intercept equation for Company B and Company C.

The graph will pop up in some random place, if you click on it and hold down the mouse button, you can drag it. Drag it below **Step 3**, where the yellow box is.

It should look like this



Step 4

There are some questions to answer on **Step 4** in Excel.