

EXCEL-erate

A how-to guide for making charts
and graphs and doing your math
homework

1. Open Excel

- On the desktop, there is a file called “Noodle_Factory”. Open it.

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	
Pad Thai	17	
Linguine	245	
Ravioli	901	
Ramen	10000000	
Lasangne	59	
Macaroni	789	

Change Data

- Click on the box with the number 100000000.
Type in “237” and press enter.

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	
Pad Thai	17	
Linguine	245	
Ravioli	901	
Ramen	237	
Lasangne	59	
Macaroni	789	

Add New Data

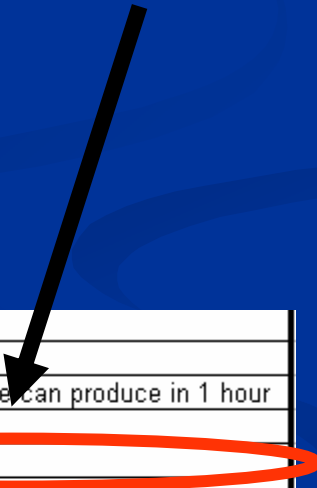
- Click in the box below “Macaroni” and add your favorite type of pasta. Press enter. Then add “747” to the second column.

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	
Pad Thai	17	
Linguine	245	
Ravioli	901	
Ramen	237	
Lasangne	59	
Macaroni	789	
Your Favorite Pasta	747	

Calculate

- Let's calculate the number of boxes that Michelle can make in 1 hour.
- Click on the empty "cell" here:

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	
Pad Thai	17	
Linguine	245	
Ravioli	901	
Ramen	237	
Lasangne	59	
Macaroni	789	
Your Favorite Pasta	747	



Calculate

- Type “=B5/24” and press enter.

Your typing shows up here

	A	B	C
1	Michelle's Noodle Factory (Sheet 1):		
2			
3	Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
4			
5	Spagetti	100	=B5/24
6	Pad Thai	17	
7	Linguine	245	
8	Ravioli	901	
9	Ramen	237	
10	Lasangne	59	
11	Macaroni	789	
12	Your Favorite Pasta	747	

Calculate

- When you press enter, the answer to the formula shows up in the box!

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	4.166666667
Pad Thai	17	
Linguine	245	
Ravioli	901	
Ramen	237	
Lasangne	59	
Macaroni	789	
Your Favorite Pasta	747	

Calculate

- OR... The easier way to do it is to type “=” and click on box B5. Then type “/24” and press enter.
- Try it and make sure that you get the same answer.

Calculate

- If you want to calculate the other values in the empty column, click on the right corner of cell C5 so that you get a little black cross.

4.66666667



Click here.

Calculate

- Now drag the little black cross down the rest of the column.
- The rest of the values should appear

	B	C	D
Michelle's Noodle Factory			
Types of Noodles:	Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour	Michelle can produce in 1 hour
Spagetti	100	4.166666667	4.166666667
Pad Thai	17		0.7083333333
Linguine	245		10.20833333
Ravioli	901		37.54166667
Ramen	10000000		9.875
Lasangne	59		2.4583333333
Macaroni	789		32.875
Your Favorite Pasta			31.125

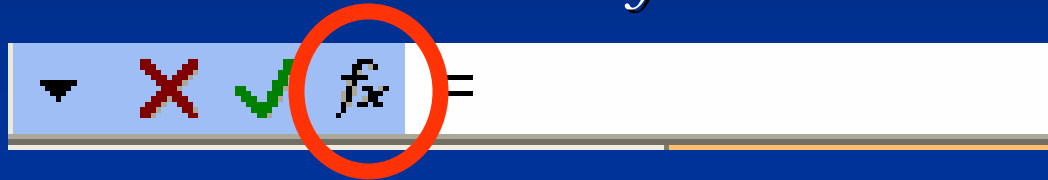
Calculate

- Let's calculate the average number of boxes of noodles that Michelle can produce in a day.
- Click on the empty box at the bottom of the second column.

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	4.166666667
Pad Thai	17	0.7083333333
Linguine	245	10.208333333
Ravioli	901	37.541666667
Ramen	237	9.875
Lasangne	59	2.4583333333
Macaroni	789	32.875
Your Favorite Pasta	747	31.125

Calculate

- Now type “=” and click on the *fx* button.

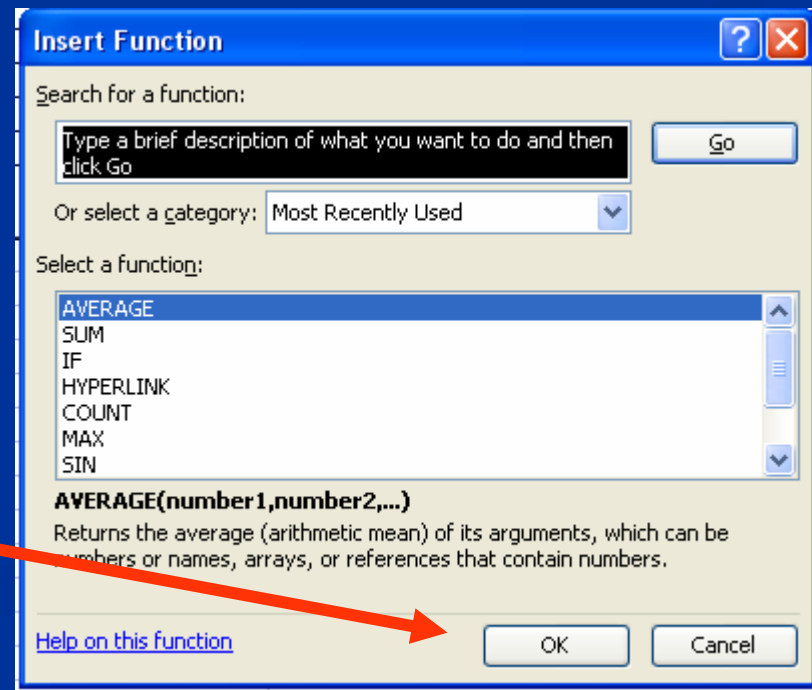
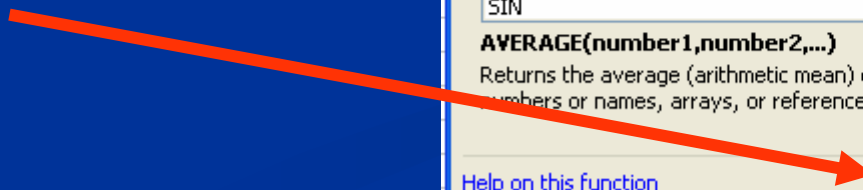


This menu should appear:

If average isn't highlighted, click on it



Now press “ok”



Calculate

The screenshot shows an Excel spreadsheet with a formula bar containing `=AVERAGE(B5:B12)`. The spreadsheet data is as follows:

Factory (Sheet 1):	
Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
100	4.166666667
17	0.708333333
245	10.20833333

The Function Arguments dialog box for the AVERAGE function is open, showing the following details:

- Function:** AVERAGE
- Number1:** B5:B12 (with a list of values: {100;17;245;901;23})
- Number2:** (empty, with a note: = number)
- Formula result =** 386.875
- Help on this function** (link)
- Buttons:** OK (circled in red) and Cancel

Your page should look like this. Click ok.

Calculate

- Now the average is in the new box!

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spagetti	100	4.166666667
Pad Thai	17	0.7083333333
Linguine	245	10.208333333
Ravioli	901	37.541666667
Ramen	237	9.875
Lasangne	59	2.4583333333
Macaroni	789	32.875
Your Favorite Pasta	747	31.125
	386.875	

Calculate

- There are lots of other formulas in the ***Fx*** menu. They are useful in lab reports that have a lot of data calculations.

If spaghetti earns \$0.89 profit a box, and ramen earns \$0.02 profit a package (hey, that stuff only cost 17 cents), can you figure out how much profit Michelle makes with one hours worth of Ramen and Spaghetti?

Calculate

- Formula = $C5*0.89+C9*0.02$
- Don't forget, you can click on the cell instead of typing in "C5" or "C9"

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spaghetti	100	4.166666667
Pad Thai	17	0.7083333333
Linguine	245	10.208333333
Ravioli	901	37.541666667
Ramen	237	9.875
Lasagna	59	2.4583333333
Macaroni	789	32.875
Your Favorite Pasta	747	31.125
	386.875	
Profit from 1 hour Ramen and Spaghetti:		3.9058333333

Let's Graph

- Select the Pasta names column and the 24 hour production column.

Michelle's Noodle Factory (Sheet 1):		
Types of Noodles:	Number of boxes Michelle can produce in 1 day (24 hours)	Number of boxes Michelle can produce in 1 hour
Spaghetti	100	4.166666667
Pad Thai	17	0.7083333333
Linguine	245	10.208333333
Ravioli	901	37.541666667
Ramen	237	9.875
Lasagna	59	2.4583333333
Macaroni	789	32.875
Your Favorite Pasta	747	31.125
	386.875	
Profit from 1 hour Ramen and Spaghetti:		3.9058333333

Let's Graph

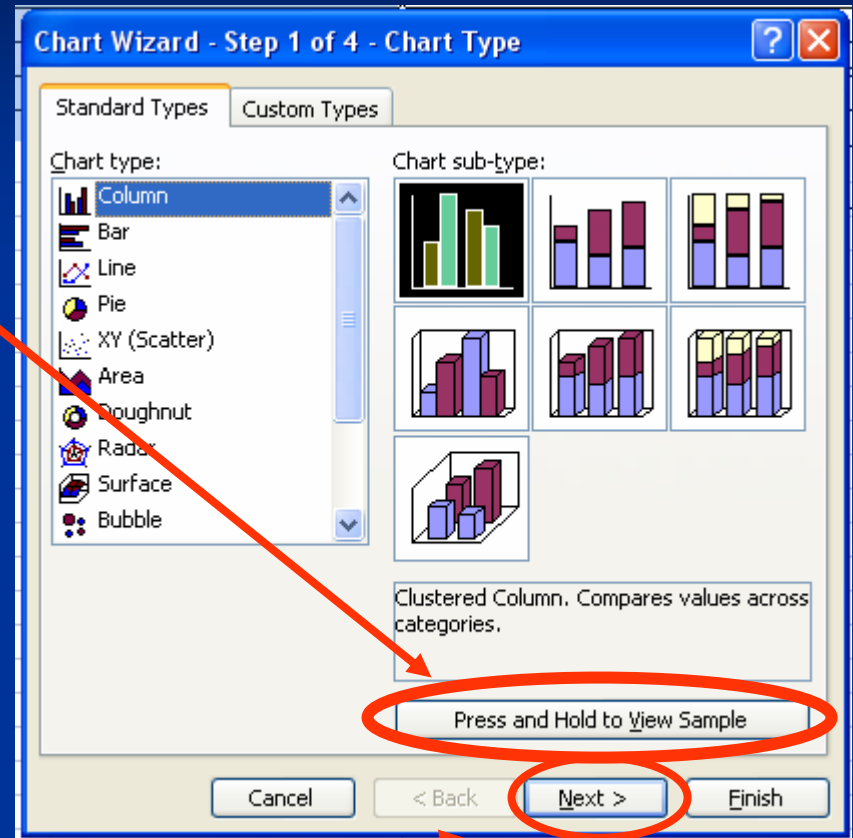
- Now click on the graph button



This menu appears:

Here you can decide what you want your graph to look like.
Press this button for a preview

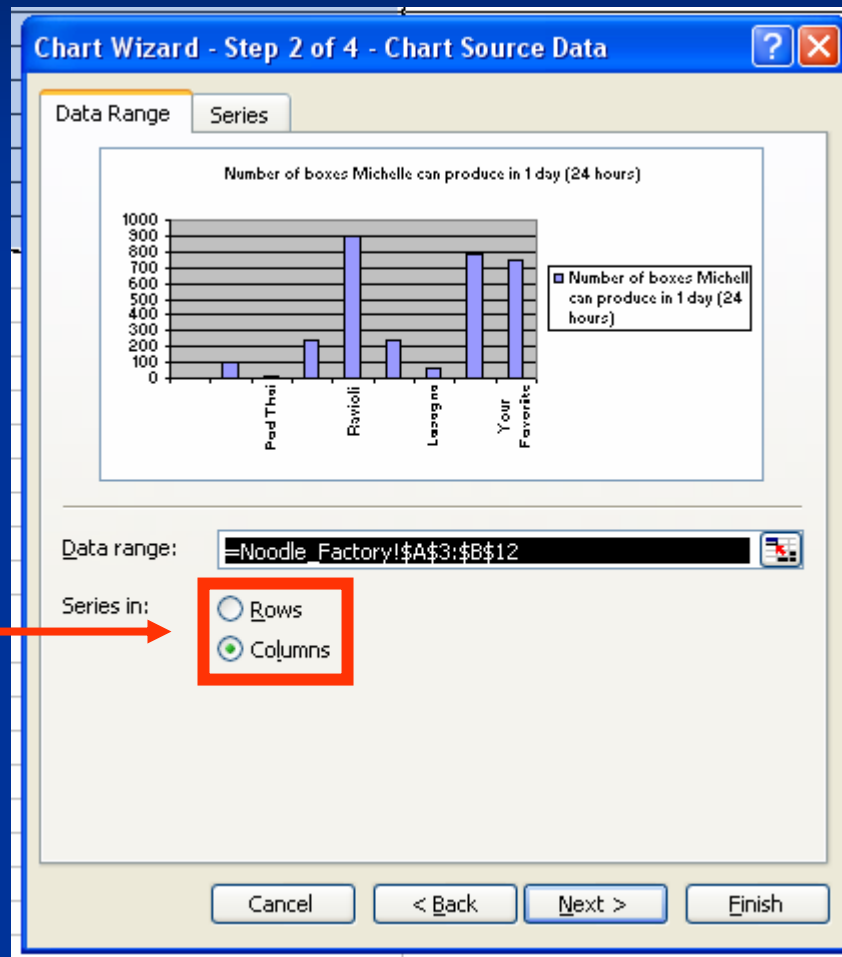
Pick whichever graph you like.



Click next

Next Menu:

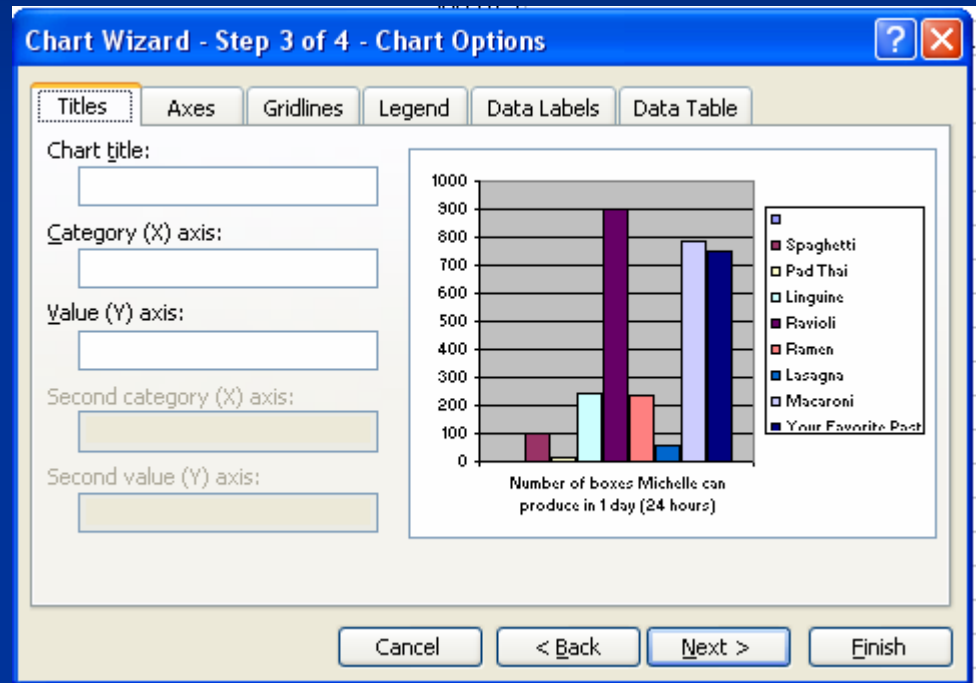
This menu allows you to see what the graph will look like in Rows or Columns. Click on both radio buttons to see what it does.



Let's choose rows (I like pretty colors) and then click "next".

Titles and more, oh boy!

Go ahead and give the graph and axes titles by typing in the boxes. You should flip through the rest of the tabs and see what they do.



- Once you have your graph looking the way you want it to, press next.

Almost Done!

Now we get options. You can either put the graph in a new sheet (though it is the same file), or as an object in your current spreadsheet. Let's make it a new sheet.



Now click "Finish"

Notice how you can see “tabs” for both your chart and the Noodle_Factory sheet that we were working on. You can switch between the two by clicking on these tabs.

You can even rename a sheet or chart by right-clicking on the tab.

All of these tabs (“worksheets”) are saved in your “workbook” when you use the file menu to save.

