

MSExcel Using it as a calculator I: Using preset functions

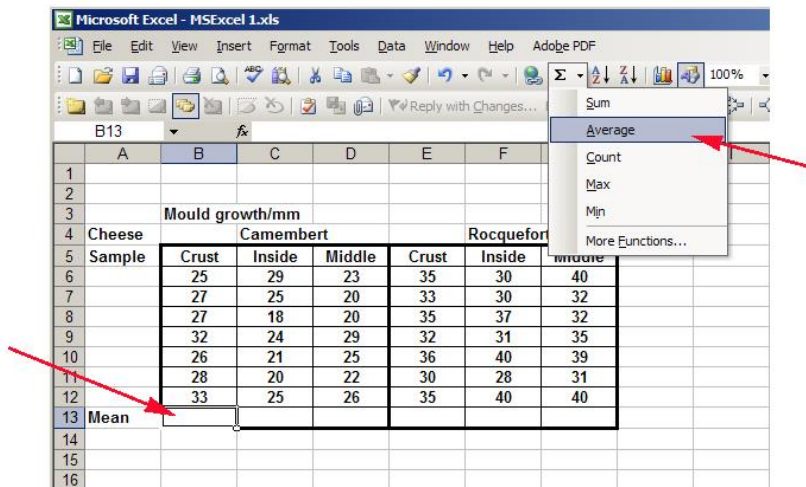
Each of the cells in a spread sheet can carry out calculations. Either you choose from the collection of functions in the tool bar or you type in your own function.

Enter your data in a new spread sheet

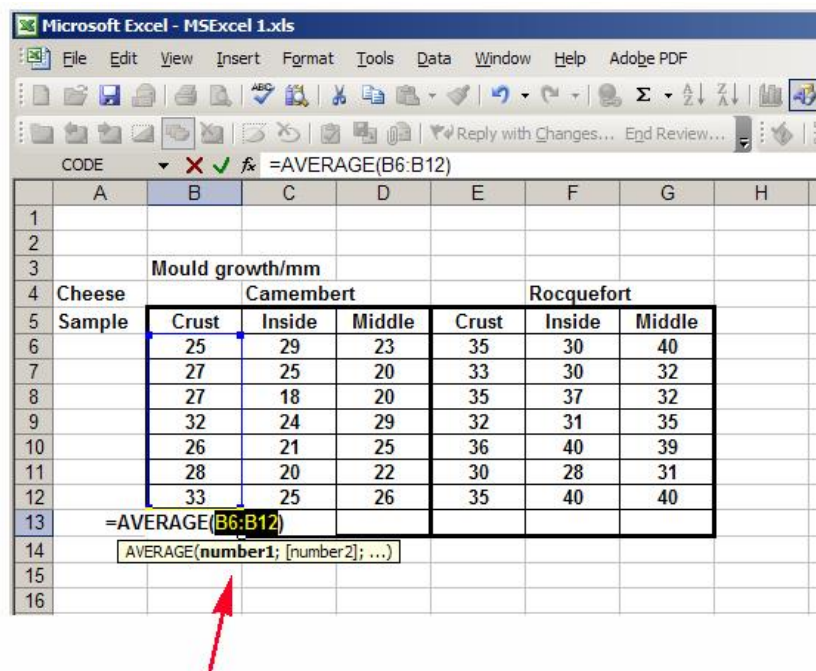
Select a cell at the bottom of a column where you want the mean (average) to be calculated.

Click on the functions button in the tool bar

Select Average (Fr: *Moyenne*) and click on it.



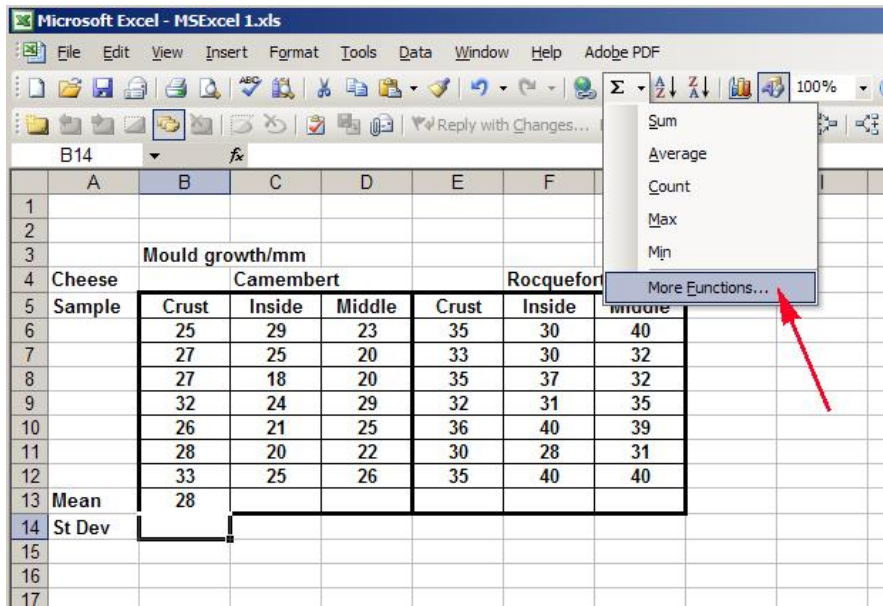
An equation will appear in the cell indicating the function and the cells it will use with this function. Check that they are the correct cells and click **OK** or press **Enter**.



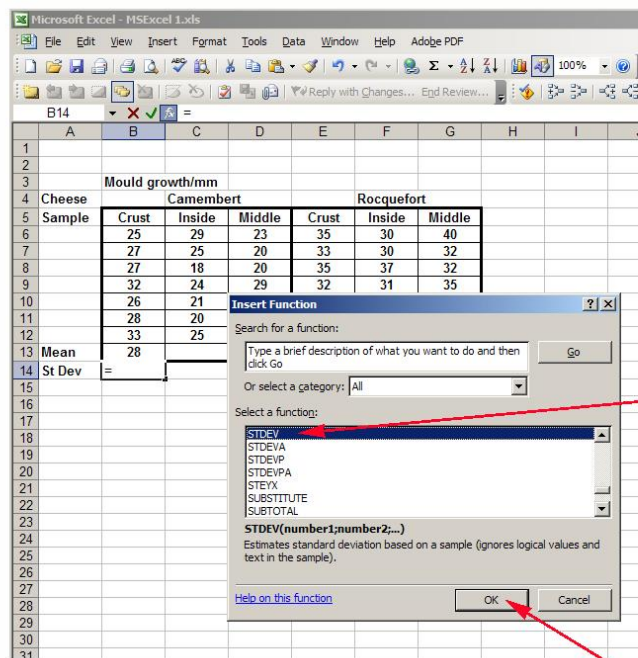
The mean will appear in the box.

The same thing can be done if you want to calculate the Standard Deviation of this sample.

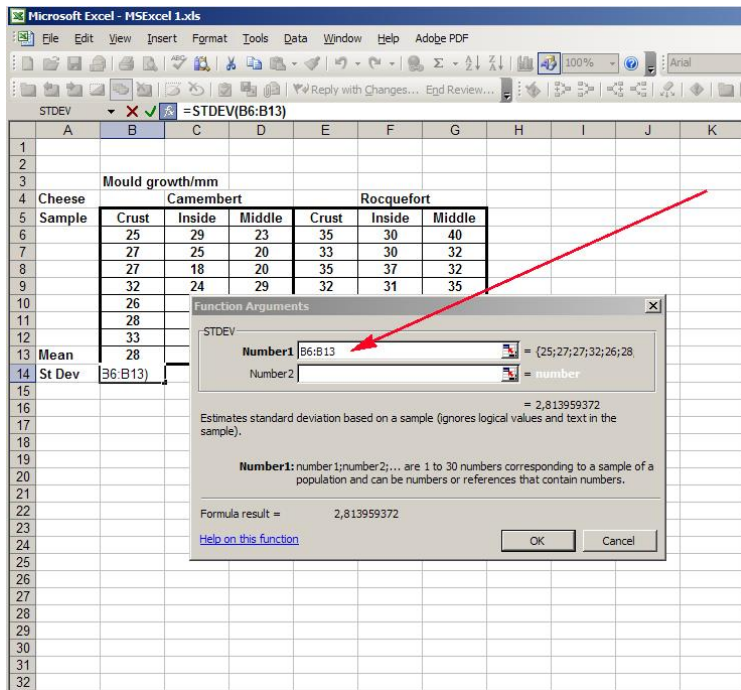
Select a cell, Click on the function button. This time you will have to search for Standard deviation (Fr: *Ecart type*) amongst the Other functions.



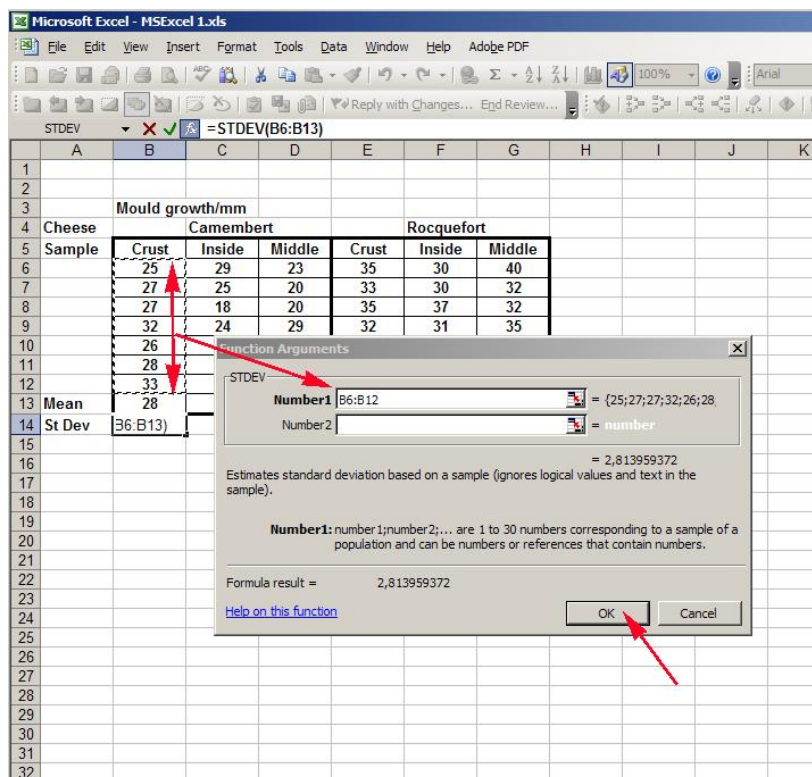
If you have used it recently it will be there. If not, look under the Statistics functions.



Click on Standard deviation. The dialogue box will tell you which cells it is using to calculate the Standard Deviation. This time you will see that it does not select the correct cells automatically.



Hold down the left mouse button and run the mouse down the correct series of figures and the cells will change in the dialogue box. Click **OK** or press **Enter**.



The Standard deviation will appear in the cell you selected.

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B14 fx =STDEV(B6:B12)

	A	B	C	D	E	F	G	H	I
1									
2									
3		Mould growth/mm							
4	Cheese	Camembert			Rocquefort				
5	Sample	Crust	Inside	Middle	Crust	Inside	Middle		
6		25	29	23	35	30	40		
7		27	25	20	33	30	32		
8		27	18	20	35	37	32		
9		32	24	29	32	31	35		
10		26	21	25	36	40	39		
11		28	20	22	30	28	31		
12		33	25	26	35	40	40		
13	Mean	28							
14	St Dev	3.039424							
15									
16									
17									
18									

If you need to adjust the number of decimal places use the buttons on the tool bar.

Microsoft Excel - M5Excel 1.xls

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B14 fx =STDEV(B6:B12)

	A	B	C	D	E	F	G	H	I	J
1										

The advantage of a spread sheet is that you can make it repeat a calculation over and over for similar series of data.

Highlight the boxes for mean and standard deviation.

Place the mouse cursor on the bottom right of the box and hold down the left mouse button.

Microsoft Excel - M5Excel 1.xls

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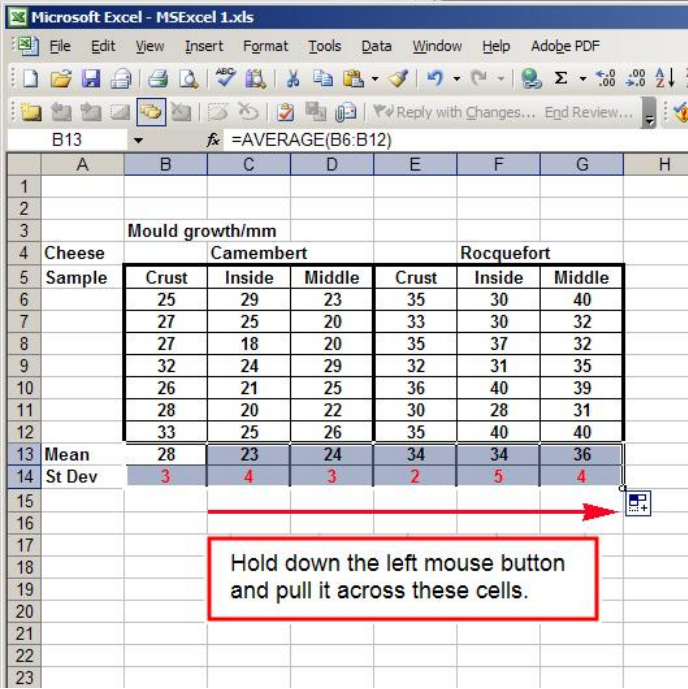
H26 fx

	A	B	C	D	E	F	G	H	
1									
2									
3		Mould growth/mm							
4	Cheese	Camembert			Rocquefort				
5	Sample	Crust	Inside	Middle	Crust	Inside	Middle		
6		25	29	23	35	30	40		
7		27	25	20	33	30	32		
8		27	18	20	35	37	32		
9		32	24	29	32	31	35		
10		26	21	25	36	40	39		
11		28	20	22	30	28	31		
12		33	25	26	35	40	40		
13	Mean	28							
14	St Dev	3							
15									
16									
17									

Highlight these two cells

Place the cursor here

Pull the cursor across the bottom of the table and then let go of the mouse. The means and standard deviations of each column will appear in the boxes.



The screenshot shows a Microsoft Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H
1								
2								
3		Mould growth/mm						
4	Cheese	Camembert			Rocquefort			
5	Sample	Crust	Inside	Middle	Crust	Inside	Middle	
6		25	29	23	35	30	40	
7		27	25	20	33	30	32	
8		27	18	20	35	37	32	
9		32	24	29	32	31	35	
10		26	21	25	36	40	39	
11		28	20	22	30	28	31	
12		33	25	26	35	40	40	
13	Mean	28	23	24	34	34	36	
14	St Dev	3	4	3	2	5	4	
15								
16								
17								
18								
19								
20								
21								
22								
23								

A red box highlights the bottom row of the data table (row 14), and a red arrow points from this box to a text box containing the instruction: "Hold down the left mouse button and pull it across these cells."