

# Excel 2007

## Functions

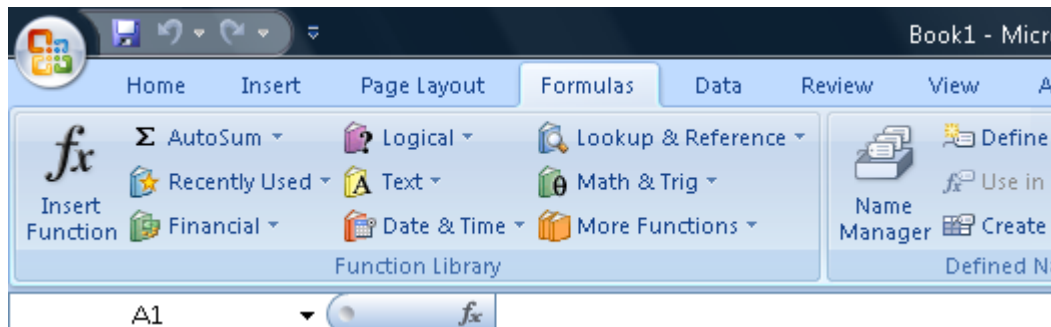
In this lesson you will learn how to:

- Explore the Function Tools
- Use AutoSum Function
  - Add
  - Max
- Turn off AutoFormat
- Use Text Functions
  - Trim
  - Left
  - Upper

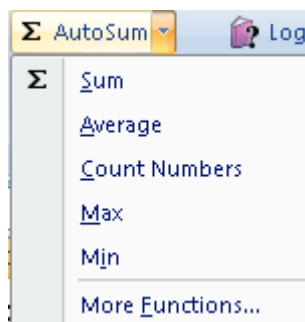
Save and Print this lesson so that you can work alongside it practising the techniques as we go.

## Functions

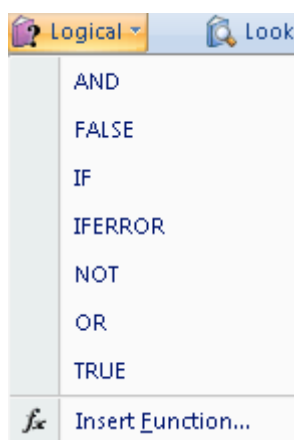
First let's look at the new ribbon and find out where the functions are placed. You will find them in the Formulas Tab.



There are a variety of functions that you can use. The AutoSum has much more than just addition. It has an Average, Count Numbers, Max & Min too.



The next category is the Recently Used which would show you all your recently used functions. Then you have a Financial which would cover Accounting. You then have the Logical Category. Which has a number of options.



There is text, date & time, Look Up & Reference and Math & Trig. So let's look at some of the basic functions to get us started.

## AutoSum

	A	B	C	D	E	F
1						
2	<b>Sales</b>					
3						
4		<b>1st Quarter</b>	<b>2nd Quarter</b>	<b>3rd Quarter</b>	<b>4th Quarter</b>	
5	<b>East</b>	45654	54896	58745	45876	
6	<b>West</b>	125876	124578	254897	235647	
7	<b>South</b>	45263	54216	54287	54218	
8	<b>North</b>	45263	54216	45217	49623	
9						
10						
11						

Here we have a Table and let's say we want to add up all of the sales in the East District for the year. First you would click your cursor in the cell that you want the answer to be, and then go up to the formula bar, click on AutoSum and choose the first option SUM. This would then add the sum ready for you to enter by clicking on the bar option or by pressing enter on your keyboard. Try this out, by adding a new spreadsheet, inserting the data above and then completing the sum.

### Maximum Function

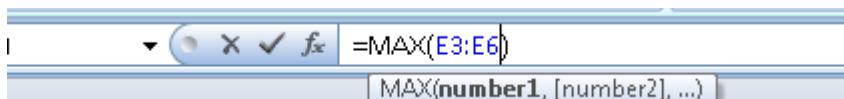
The next function I want to show you is the Maximum function which can be found on the AutoSum feature, take the table above, if we wanted to know the maximum amount of Sales for the East District we can see clearly that it is in the 3<sup>rd</sup> Quarter but if you had a very large Worksheet, you can see how useful this function would be. Try it out now using the Max function in the AutoSum menu using the data above add a Max row.

	A	B	C	D	E
1	<b>Bakers Dozen</b>				
2	<b>Month</b>	<b>Catering</b>	<b>Internet</b>	<b>PR</b>	<b>Restaurant</b>
3	Jan	24566	2588	235	12555
4	May	27854	1566	788	7921
5	April	34558	1254	888	95646
6	August	31244	2541	598	15454
7					
8			Total		131576
9			Maximum		131576

You can see that this is not what we want as Excel has just added up the Total Row, to rectify this, you can add the correct cells in the formula bar. Or if you prefer by clicking and dragging with your mouse to select the cells that you want the maximum amount for.

Bakers Dozen					
Month	Catering	Internet	PR	Restaurant	
Jan	24566	2588	235	12555	
May	27854	1566	788	7921	
April	34558	1254	888	95646	
August	31244	2541	598	15454	
			Total	131576	
			Max	=MAX(E8)	

Click and drag the text box to cover the right cells, or change the formula bar to the correct cells.



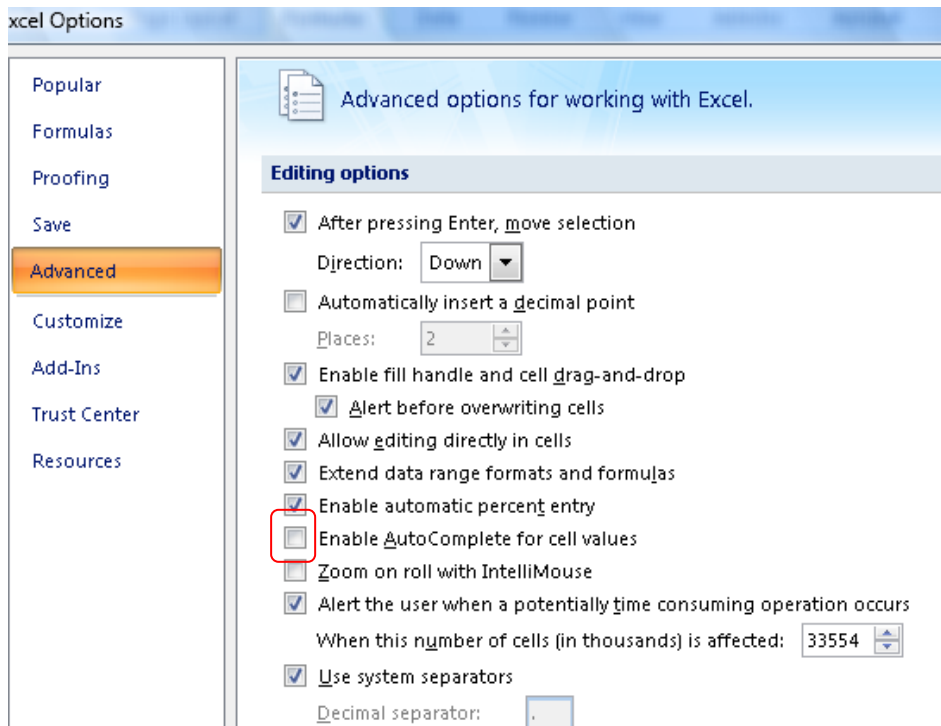
You can then click on the tick or press enter on your keyboard to get your answer.

## Text Function

This function is useful when you are formatting the look of your table. First we will be working on the table above but with some changes made to it. You can see for the purpose of this exercise that I have added a column and some spaces before my text. This could well be a real situation. Insert your cursor in the empty column next to the first line of text, you can see that there are too many spaces before the text that I want to remove, I could go down the column and do it all by hand so that the text lines up with the column, or I could use a text function.

Month	Catering	Internet	PR	Restaurant	
Jan	24566	2588	235	12555	
May	27854	1566	788	7921	
April	34558	1254	888	95646	
August	31244	2541	598	15454	
			Total	131576	

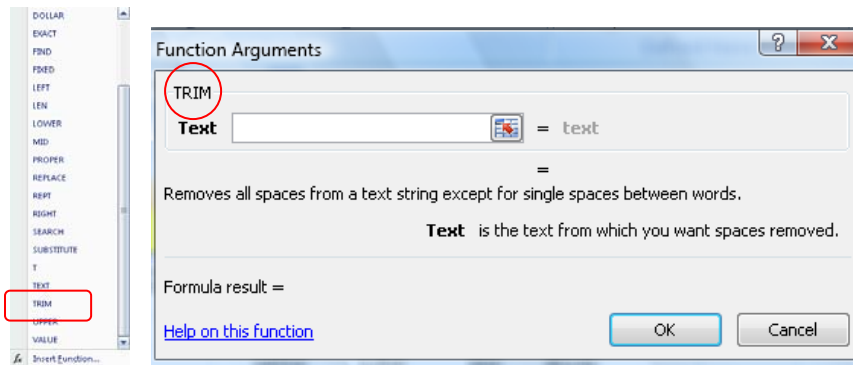
First, you must ensure that the AutoComplete Box is un-ticked click on the Office Button/Excel Options/Advanced/Enable AutoComplete for cell values. We want to set our own values, if this box is ticked we will get a wrong result. Once you have done this, go back to the workbook, click in the first cell that we want to add our new text until it has a black box around it.



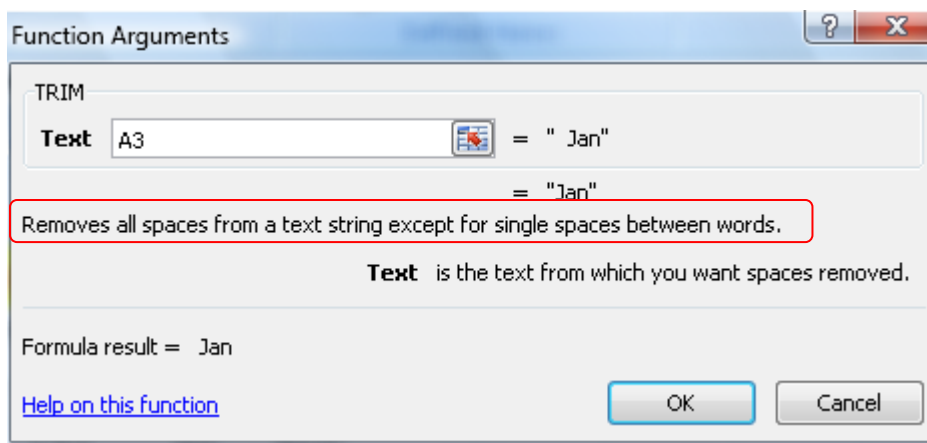
## Trim Function

A	B	C	D	E	F
<b>Bakers Dozen</b>					
Month		Catering	Internet	PR	Restauran
Jan		24566	2588	235	12555
May		27854	1566	788	7921
April		34558	1254	888	95646
August		31244	2541	598	15454

Place your cursor in the empty column next to the Month on the first row of where we want to adjust the data. Click on the Text Function and from the fly-out choose Trim. This will trim away all the unwanted spaces. When you click on Trim the following box will open up. Now click on the wrong cell with the wrong text, Excel 2007 will automatically enter the function in the cell ref.

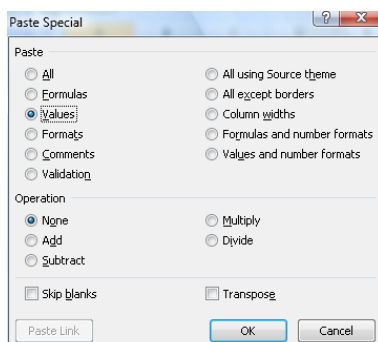


From this box we can read the Text says Removes all spaces from a text string except for single spaces between words. This is the function that we want.



Press OK. Your formula will then be inserted into the first cell. We could do this for each of our rows but let's say you had a spreadsheet with 50 rows, it would take some time. So we are going to copy the function.

Click on the cell where the formula is and drag down on the small box. Then let go, Excel 2007 will have entered the data. So now everything is fine except the data is in the wrong column, select the right column right click on your mouse and choose copy, place your cursor where you want the new data to go and click on paste special. A box will open up, we want to choose the Values radio as that is what we want, to add the values of the function.

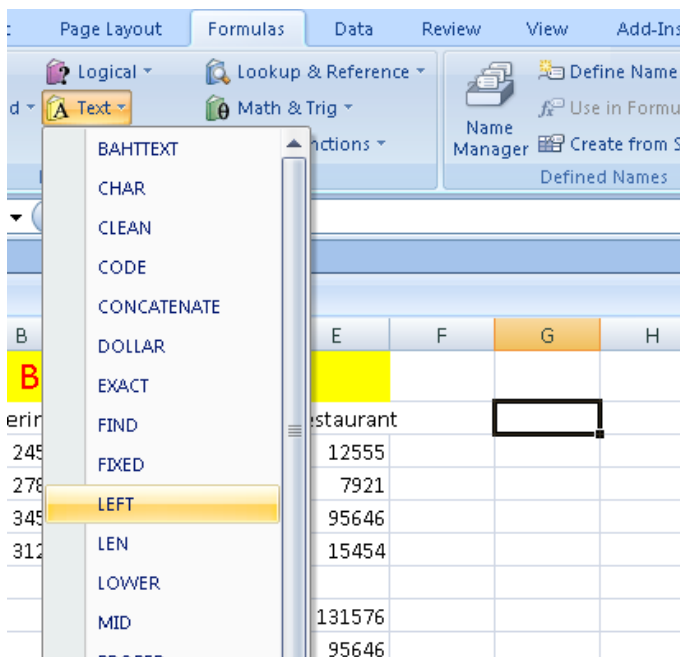


Now all that remains is to select the column which we do not want, right click on our mouse and choose delete. We now have a perfect table with the column and data aligned as we want it to be.

	A	B	C	D	E
1	<b>Bakers Dozen</b>				
2	Month	Catering	Internet	PR	Restaurant
3	Jan	24566	2588	235	12555
4	May	27854	1566	788	7921
5	April	34558	1254	888	95646
6	August	31244	2541	598	15454
7					

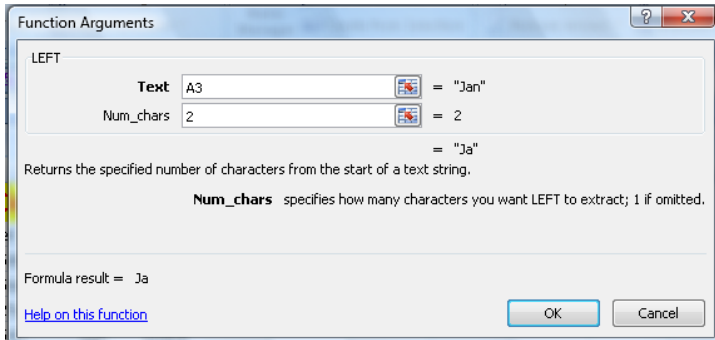
There are many more text functions, too many to go into all of them in this lesson, so experiment with them. Remember the function box will give you the information so you can see if that is the right function you want to use. Or, if you hover over the function you will usually see a screen tip, if you have customised Excel 2007 to show them, telling you what the function does. Let's do another text function now, using the same table.

### Left Function



Place your cursor where you want the new information to go. Click on the Text functions and choose left.

A box opens up for us to enter our data of what string we want to use to shorten the letters for. Choose A3 in the text box. Choose 2 in the number box. Click OK.



Bakers Dozen				
Month	Catering	Internet	PR	Restaurant
Jan	24566	2588	235	12555
May	27854	1566	788	7921
April	34558	1254	888	95646
August	31244	2541	598	15454

Click and Drag down to copy the function. Let go and all your text will be shortened to two places. Select the chosen rows only, after the headings row.

12555	Ja
7921	Ma
95646	Ap
15454	Au

Bakers Dozen				
Month	Catering	Internet	PR	Restaurant
Ja	24566	2588	235	12555
Ma	27854	1566	788	7921
Ap	34558	1254	888	95646
Au	31244	2541	598	15454
			Total	131576
			Max	95646

Right click and choose copy. Go to the column where you want the new text added, click in the cell under Month right click and choose Paste Special, then tick the Values radio.

Here is the completed table.

## Upper Function

This is the last function and it is the UPPER function. Place your cursor in an empty cell click on Text and choose UPPER, which will convert our titles to Upper case letters.

In the Text area of the Function Box, type in A2 click OK

Copy and Drag the Function out along the required number of cells then let go.

Restaurant	MONTH	CATERING	INTERNET PR	RESTAURANT
2555				
7921				
5646				
5454				
1576				
5646				

Right Click choose Copy, go the place where you want your new text added, in the month heading and choose Paste Special, choose Values.

	A	B	C	D	E	F
1	<b>Bakers Dozen</b>					
2	MONTH	CATERING	INTERNET PR		RESTAURANT	
3	Ja	24566	2588	235	12555	
4	Ma	27854	1566	788	7921	
5	Ap	34558	1254	888	95646	
6	Au	31244	2541	598	15454	
7						
8				Total	131576	
9				Max	95646	

Here is the completed table, you might want to do a little modifying of expanding the restaurant column.

Whatever you need to do in Excel 2007, check to see if there is a Function for it, to save you time.

That is the end of this lesson, we have only just touched on what functions can do. If you practised as we went through the lesson.

You will have learned how to:

- Explore the Function Tools
- Use AutoSum Functions
  - Add
  - Max
- Turn off AutoFormat
- Use Text Functions
  - Trim
  - Left
  - Upper