

## Lesson 2-11: Use AutoSum to quickly calculate averages

Excel's *AutoSum* feature isn't only restricted to addition. It is also able to compute averages and maximum/minimum values.

In this lesson we'll use AutoSum to calculate the average sales for each month.

- 1 Open *First Quarter Sales and Profit 5* from your sample files folder (if it isn't already open).

- 2 Delete cells E3:E4.

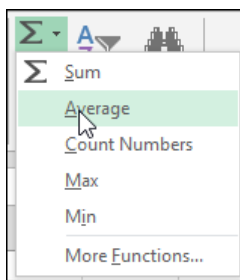
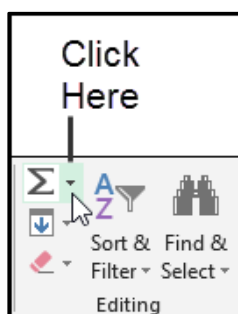
Select cells E3 and E4 and press the <Delete> key on your keyboard.

- 3 Type the word *Average* in cell E3 and press the <Enter> key.

The cursor moves to cell E4:

	A	B	C	D	E
3		Jan	Feb	Mar	Average
4	New York	22,000	29,000	19,000	

- 4 Use AutoSum to create a formula that will show the average New York sales in cell E4.




1. Click: Home→Editing→AutoSum →Drop down arrow (see sidebar).

A drop down menu is displayed showing all of the different ways in which AutoSum can operate upon a range of cells:

2. Click *Average*.
3. Excel generates an Average function and inserts the cell range B4:D4. This is exactly what we want:

E	F	G
Average		
=AVERAGE(B4:D4)		
AVERAGE(number1, [number2], ...)		

4. Press the <Enter> key or click the AutoSum button  again to see the average sales for New York:

	Jan	Feb	Mar	Average
3				
4	New York	22,000	29,000	19,000
				23,333

- 5 Type the word: **Maximum** into Cell F3 and then press the <Enter> key.

- 6 Use AutoSum to create a formula in cell F4 that will show the Maximum New York Sales for this period.

1. Place an AutoSum in cell F4 but this time, choose *Max* from the drop-down menu.

**First Quarter Sales and Profit-5**

This time we have a small problem. AutoSum is including the average value (23,333) in the calculation.


	B	C	D	E	F
	Jan	Feb	Mar	Average	Maximum
	22,000	29,000	19,000	23,333	=MAX(B4:E4)

2. Select cells B4:D4 with the mouse

The marquee corrects and the average value in cell E4 is no longer included.

3		Jan	Feb	Mar	Average	Maximum
4	New York	22,000	29,000	19,000	23,333	=MAX(B4:D4)

Notice that the MAX function is now working with the range B4:D4.

3. Press the <Enter> key or click the AutoSum button  once more to see the maximum sales the New York office managed during the first quarter of the year:

3		Jan	Feb	Mar	Average	Maximum
4	New York	22,000	29,000	19,000	23,333	29,000

- 7 Change the words *USA Sales* in cell A9 back to *Sales* and press the <Tab> key.

- 8 Press the <F2> key on the keyboard (or double-click cell B9) to bring back the marquee (shown as a blue box).

- 9 Adjust the marquee using click and drag so that all offices are included in the Sales total.

Notice that there is a small blue spot on each corner of the range. These are called *sizing handles*.

1. Hover the mouse cursor over the bottom right (or bottom left) sizing handle until the cursor shape changes to a double headed arrow. It is really important that you see the double headed arrow and not the four headed arrow or white cross.

4	New York	22,000
5	Los Angeles	42,000

2. When you see the double headed arrow click and drag with the mouse down to cell B8.
3. Release the mouse button.
4. Press the <Enter> key or click the AutoSum button again.

	A	B
3		Jan
4	New York	22,000
5	Los Angeles	42,000
6	London	18,000
7	Paris	35,000
8	Munich	12,000
9	Sales	129,000
10	Jan/Mar Sales	257,000

- 10 Save your work as *First Quarter Sales and Profit-6*.

## tip

Another way to bring back the blue box showing a range is to click the range in the *Formula Bar*.