

Functions and error values


Excel needs very precise instructions, which means that formulas must be typed exactly as shown. Missing a comma or parenthesis, or misspelling a function name, will produce errors.

Before you begin



During the practice, this window will stay on top of the program you are working in. When it covers an area you need to use, move and resize it as follows:

To move this window, click the title bar of the window (as shown below) and drag it to a new location:




To resize this window, drag the resize handle  in the lower-right corner.

Set up your workspace

If your worksheet has white page margins at the top, click the **View** tab on the Ribbon. In the **Workbook Views** group, click **Normal** to switch from Page Layout view to Normal view. (Or click the **Normal**  button on the **View** toolbar  at the bottom of the screen.)

Exercise 1: Find an average

In cell D8, find an average of the totals in column B and column C.

Here's how Click in cell D8, click the arrow on the **Sum** button  in the **Editing** group on the **Home** tab, and then click **Average** in the list. Then press ENTER. The answer is 113.43.

Exercise 2: Find the largest number

You don't need a formula to determine that 95.94 is the largest number in column B. But imagine that the list is long, in which case a formula would be useful. In cell B9, use a formula to find the largest number.

Here's how Click in cell B9, click the arrow on the **Sum** button, and click **Max** in the list. Then press ENTER.

Before you go on to the next exercise, delete the result in cell B9.

Exercise 3: Find the smallest number


Again, it's obvious that 15.96 is the smallest number in column C, but try using a formula anyway in cell C9 to find the smallest number in column C.

Here's how Select cell C9, click the arrow on the **Sum** button, and click **Min** in the list. Then press ENTER.

Before you go on to the next exercise, delete the result in cell C9.

Exercise 4: Display and hide formulas

Display all the formulas in the worksheet, and then hide all the formulas.

Here's how Click the **Formulas** tab. In the **Formula Auditing** group, click **Show Formulas** . To hide the formulas, click **Show Formulas** again. You can also press CTRL+` (next to the 1 key on most keyboards) to display and hide formulas.

Note When you display the formulas, you'll see the formulas you've entered as well as the formulas we entered to create the original data.

Exercise 5: Error values

To create an ##### error so that you can fix it, make column B narrower by dragging the column boundary until the ##### error appears. To do this, move the pointer over the column heading until the pointer changes to a dark cross with two arrow points. Then drag the column. You may have to drag the column boundary several times to make the column narrow enough to create the ##### error.

	A	B	C
1			
2			
3			

Then resize the column again to make the formula result appear. The display is updated whenever you drop the column boundary in a new position, so it can take more than one try to make the column wide enough to display the formula result.

Exercise 6: Error value #Name?

Here's another error you can create and fix. Use the SUM function, but misspell it.

In cell B8, delete the total 95.94 and then type **=SUME(B4:B7)** (notice the extra "E" typed in the function name). (The Formula AutoComplete list will display, to help you enter the formula. Just ignore it and continue to type.) After you press ENTER you'll see #NAME? because of the spelling error.

To fix the error, click in cell B8 and then place the pointer in the formula bar. Or double-click in the cell to display the formula and then edit it. Delete the "E" from "SUME" and press ENTER. The formula result will appear correctly.