Office: Excel for Beginners

What is Excel?

Excel 2013 is a spreadsheet program that allows you to store, organize, and analyze information. Excel can be used for organizing a home budget, creating an invoice, organizing a training log, or tracking inventory.

Additional Resources: http://www.gcflearnfree.org/office2013/excel2013/

Basic Terminology

Workbook: An Excel file that is comprised of multiple worksheets. When you want to create a new document, you'll select FILE → New → Blank Workbook.

Worksheet: Every workbook contains at least one worksheet by default. When working with a large amount of data, you can create multiple worksheets to help organize your workbook and make it easier to find content.

Columns: A collection of cells that run vertically. By default, columns are identified by letters (A,B,C) in Excel. (See image below)

Rows: A collection of cells that run horizontally. By default, rows are identified by numbers (1,2,3) in Excel. (See image below)

Cells: The individual boxes or rectangles that make up a worksheet. A cell is the intersection of a row and a column. (See image below)
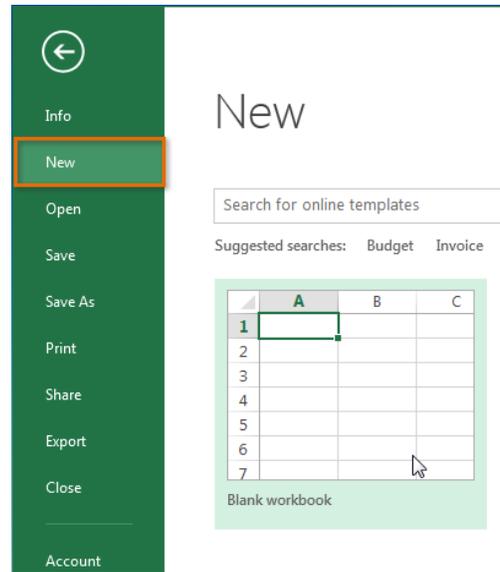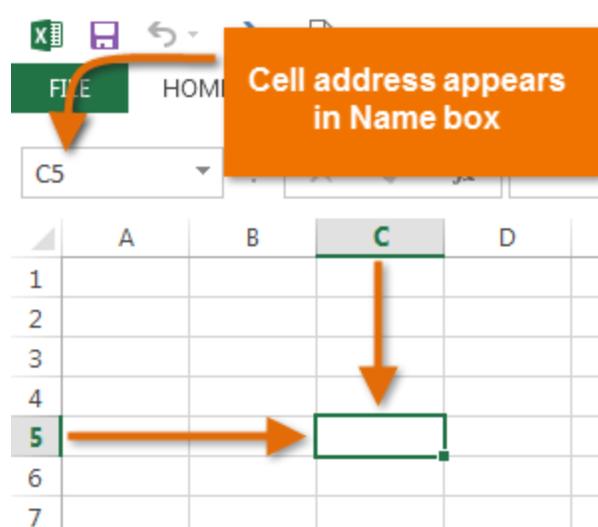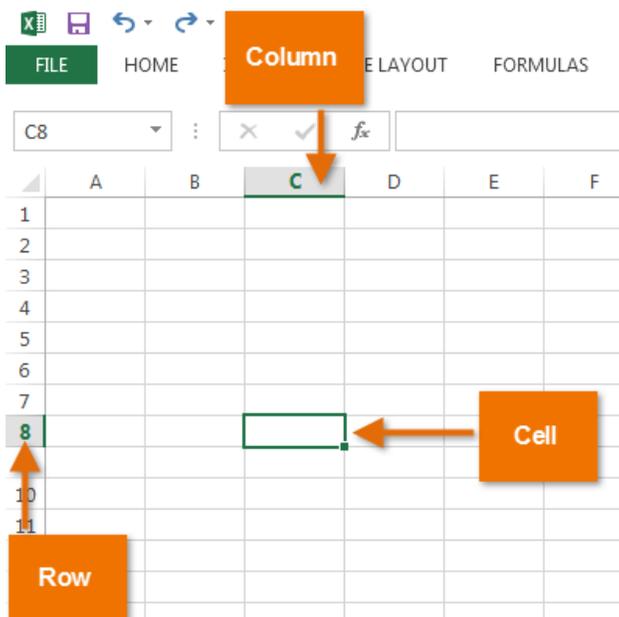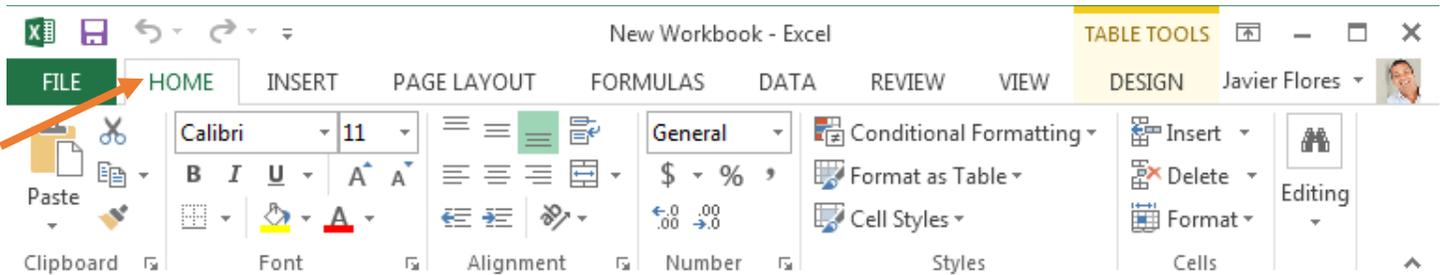
Content Source: GCFLearnFree.org

Navigating Excel

The Ribbon (Menu)

The Ribbon contains multiple tabs, each with several groups of commands. You will use these tabs to perform the most common tasks in Excel.

The Home tab gives you access to some of the most commonly used commands for working with data in Excel 2013, including copy and paste, formatting, and number styles. The Home tab is selected by default whenever you open Excel.
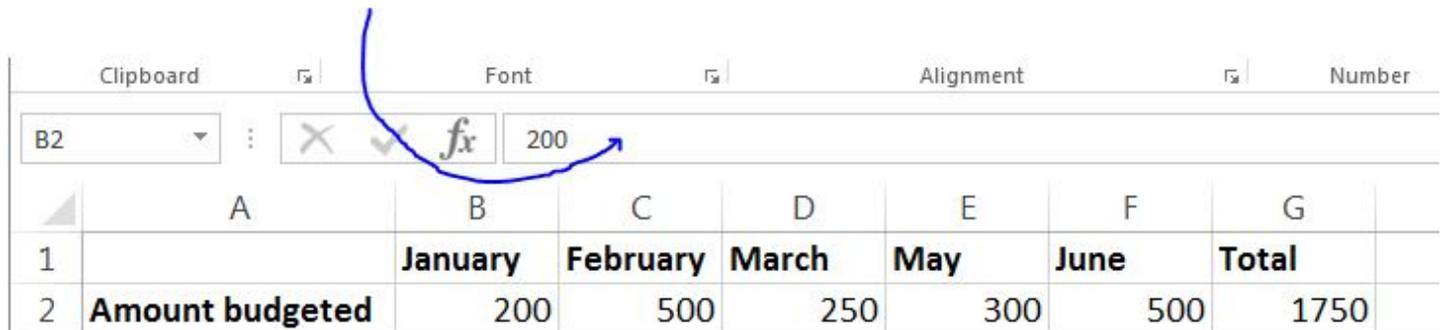
Status Bar

The status bar appears at the bottom of the screen. That status bar is the quickest way to see the average, count, numerical count, minimum, maximum or sum of selected cells. It also contains the zoom bar and different page view options.

Formula Bar

In the formula bar, you can enter or edit data, a formula, or a function that will appear in a specific cell.

Data Entry

How do I add data or text to a workbook?

Click a cell to select. A border will appear around the cell. Start typing the content then press Enter on the keyboard. You can edit data in a cell by clicking on a cell and editing the data in the Formula Bar or by double-clicking and editing the data directly in the cell.

By default, letters and words are left-aligned and numbers are right-aligned.

Content Source: GCFLearnFree.org

Auto-fill

Excel recognizes certain patterns in data and can auto-fill month, dates, days of the week, and numbers. To use the auto-fill feature, drag the dark green square on the bottom right hand corner of the cell or double click on it to automatically populate a column.

Dates & Times

Excel allows you to format dates and times in a variety of ways. Input a date or time into a cell. To change the formatting of a date or time, right click on a cell. Then select, "Format cell.."
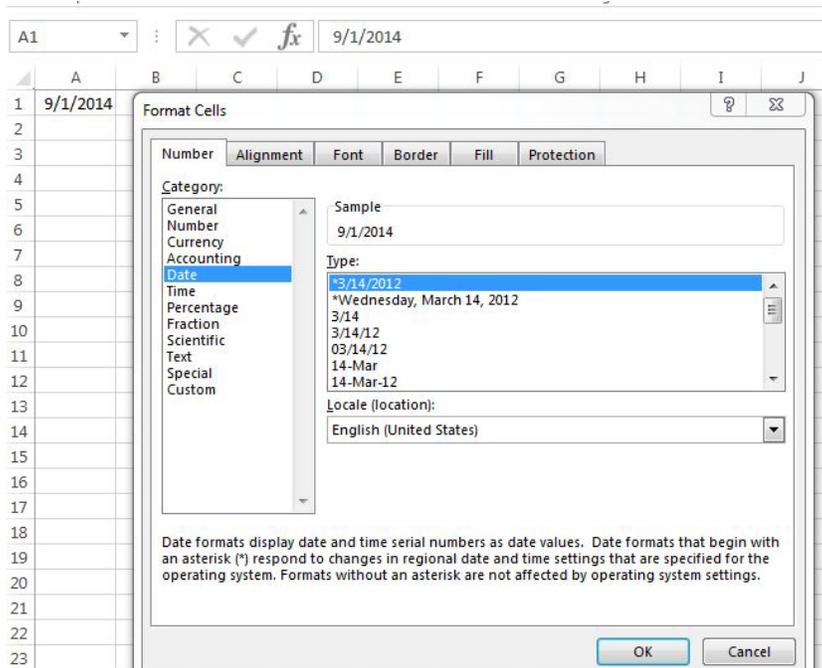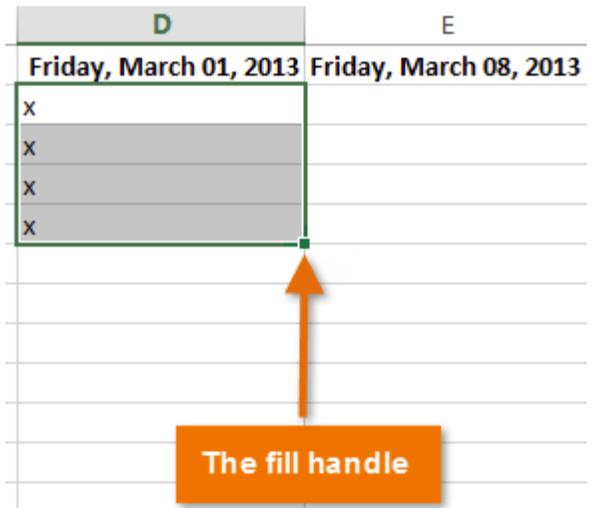
Undo & Redo

The Undo button located at the top left corner of the screen allows you to "undo" the last action or the last series of actions. You can pick and choose from a list of recently completed actions.

The Redo button allows you to redo an action that your have recently undone.

Modifying Columns, Cells & Rows

To modify column width:

1) Position the mouse over the **column line** in the **column heading** so the **white cross** ⊹ becomes a **double arrow** ╬
2) Click, hold, and drag the mouse to **increase** or **decrease** the column width.
3) Release the mouse. The **column width** will be changed.

If you see **pound signs** (#######) in a cell, it means that the column is not wide enough to display the cell content. Simply **increase the column width** to show the cell content.
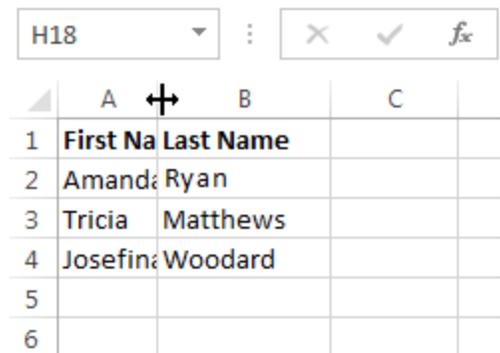
To AutoFit column width:

The **AutoFit** feature will allow you to set a column's width to fit its content **automatically**.

1. Position the mouse over the **column line** in the **column heading** so the **white cross** ⊹ becomes a **double arrow** ╬.
2. Double-click the mouse. The **column width** will be changed automatically to fit the content.

You can also AutoFit the width for several columns at the same time. Simply select the columns you would like to AutoFit, then select the **AutoFit Column Width** command from the **Format** drop-down menu on the **Home** tab. This method can also be used for **Row height**.
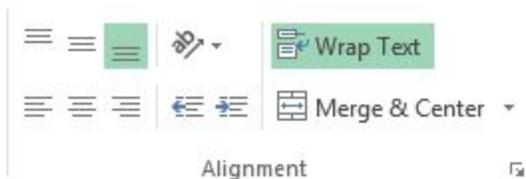
To modify row height:

1. Position the cursor over the row line so the white cross Cursor becomes a double arrow Double-arrow.
2. Click, hold, and drag the mouse to **increase** or **decrease** the row height.
3. Release the mouse. The **height** of the selected row will be changed.
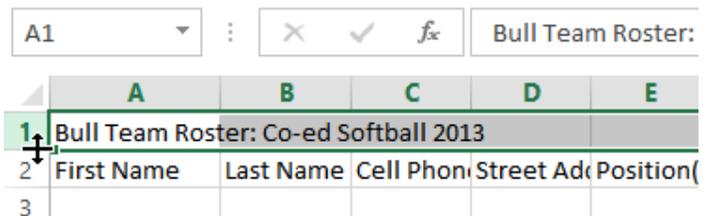
Wrapping Text

If you have data that won't fit across the column width but you don't want to make the column wider, you have the option of selecting Wrap Text from the Ribbon. It will cause the data to wrap to the next line in the same cell.

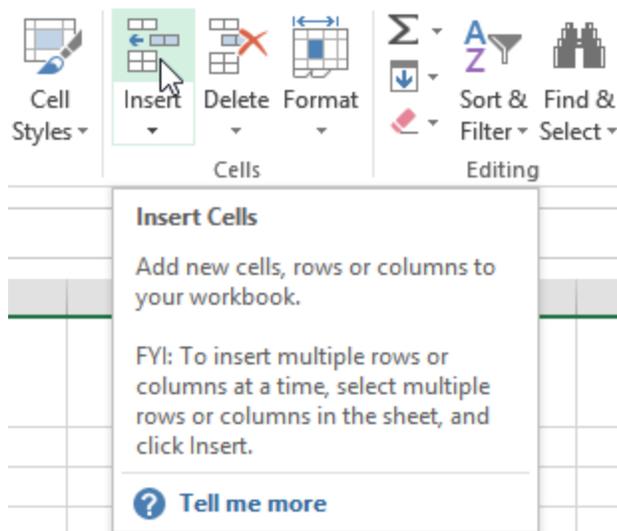## Inserting, deleting, moving, and hiding rows and columns

After you've been working with a workbook for a while, you may find that you want to **insert new** columns or rows, **delete** certain rows or columns, **move** them to a different location in the worksheet, or even **hide** them.

To insert rows:

1. Select the **row heading** below where you want the new row to appear. For example, if you want to insert a row between rows 7 and 8, select row 8.

5	Neil	Crawford	908-555-2234	2312 Stonepot Road
6	Anthony	Keel	267-555-0144	533 Spring Avenue
7	Ray	Logan	256-555-2475	2439 Ritter Street
8	Tricia	Matthews	808-555-6397	4721 Arron Smith Drive
9	Leola	McNew	580-555-8177	2182 Cody Ridge Road
10	Joshua	Milliman	213-555-1117	2166 Zimmerman Lane

2. Click the **Insert** command on the **Home** tab.

Insert Cells

Add new cells, rows or columns to your workbook.

FYI: To insert multiple rows or columns at a time, select multiple rows or columns in the sheet, and click Insert.

? **Tell me more**

3. The **new row** will appear **above** the selected row.

5	Neil	Crawford	908-555-2234	2312 Stonepot Road
6	Anthony	Keel	267-555-0144	533 Spring Avenue
7	Ray	Logan	256-555-2475	2439 Ritter Street
8				
9	cia	Matthews	808-555-6397	4721 Arron Smith Drive
10	Leola	McNew	580-555-8177	2182 Cody Ridge Road

To insert columns:

1. Select the **column heading** to the right of where you want the new column to appear. For example, if you want to insert a column between columns D and E, select column E.

D	↓ E	F
Street Address	Position(s)	
300 Round Table Drive	Pitcher, Second base	
4721 Arron Smith Drive	Catcher	
2152 Liberty Avenue	Outfield	
3503 Prospect Valley Road	First base	
1483 Frosty Lane	Third base	

2. Click the **Insert** command on the **Home** tab.

Insert Cells

Add new cells, rows or columns to your workbook.

FYI: To insert multiple rows or columns at a time, select multiple rows or columns in the sheet, and click Insert.

? **Tell me more**
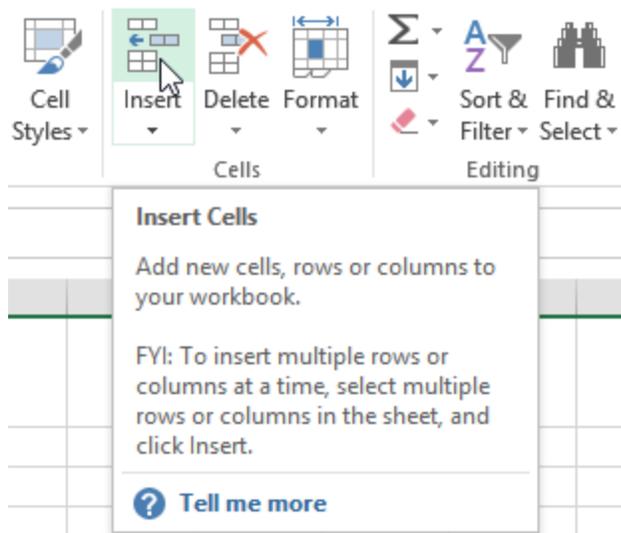
3. The **new column** will appear **to the left** of the selected column.

When inserting rows and columns, make sure you select the entire row or column by clicking the **heading.** If you select only a cell in the row or column, the **Insert** command will only insert a new cell.

To hide and unhide a row or column:

At times, you may want to **compare** certain rows or columns without changing the organization of your worksheet. Excel allows you to **hide** rows and columns as needed. In our example, we'll hide columns C and D to make it easier to compare columns A, B, and E.

1. Select the **column(s)** you wish to **hide**, right-click the mouse, then select **Hide** from the **formatting** menu.

2. The columns will be **hidden**. The **green column line** indicates the location of the hidden columns.

3. To **unhide** the columns, select the columns to the **left** and **right** of the hidden columns (in other words, the columns on **both sides** of the hidden columns). In our example, we'll select columns **B** and **E**.

4. Right-click the mouse, then select **Unhide** from the **formatting** menu. The hidden columns will reappear.

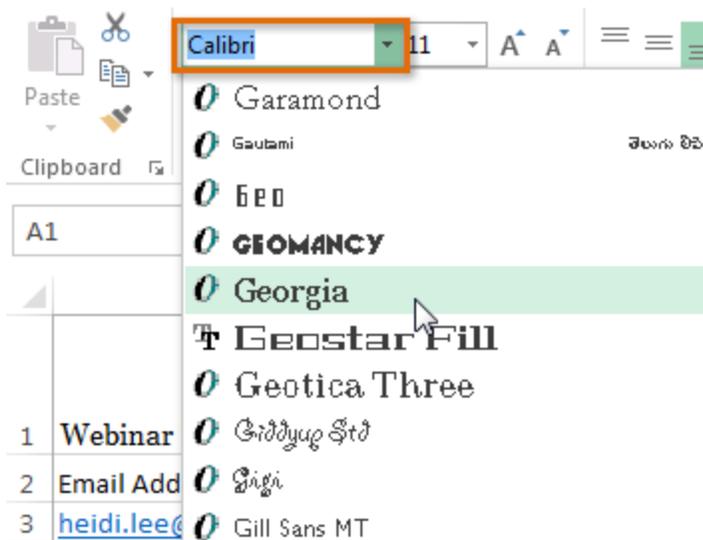
Content Source: GCFLearnFree.org

Formatting Font

By default, the font of each new workbook is set to Calibri. However, Excel provides a variety of other fonts you can use to customize your cell text. In the example below, we'll format our **title cell** to help distinguish it from the rest of the worksheet.

1. Select the **cell(s)** you wish to modify.

2. Click the **drop-down arrow** next to the **Font** command on the **Home** tab. The **Font** drop-down menu will appear.

3. Select the desired **font**. A **live preview** of the new font will appear as you hover the mouse over different options. In our example, we'll choose **Georgia**.
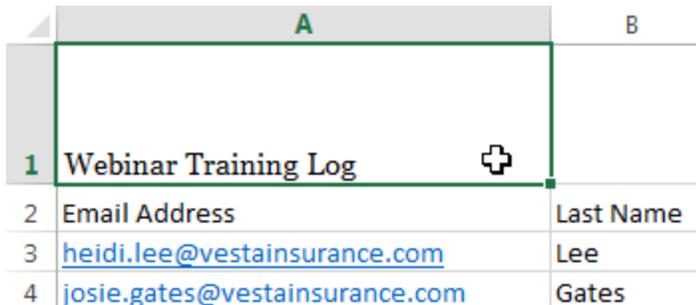

4. The text will change to the **selected font** .

When creating a workbook in the workplace, you'll want to select a font that is easy to read. Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.
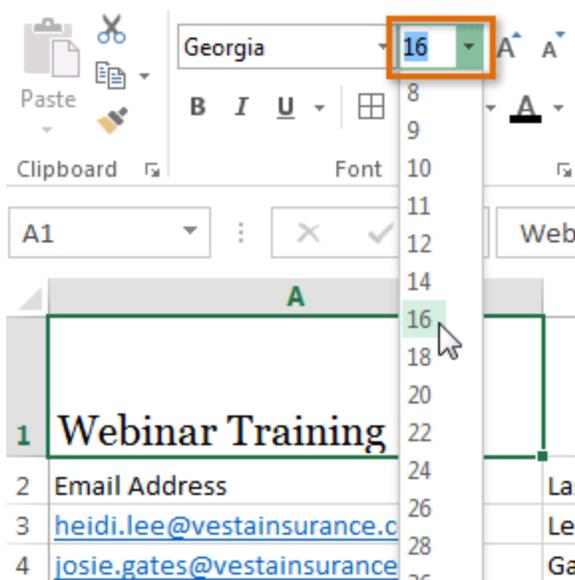
To change the font size:

1. Select the **cell(s)** you wish to modify.

2. Click the **drop-down arrow** next to the **Font Size** command on the **Home** tab. The **Font Size** drop-down menu will appear.

3. Select the desired **font size**. A **live preview** of the new font size will appear as you hover the mouse over different options. In our example, we will choose **16** to make the text **larger**.

4. The text will change to the **selected font size**.

You can also use the **Increase Font Size** and **Decrease Font Size** commands or enter a **custom font size** using your keyboard.

Using Formulas in Excel

Excel uses standard operators for formulas, such as a **plus sign** for addition (**+**), a **minus sign** for subtraction (**-**), an **asterisk** for multiplication (*****), a **forward slash** for division (**/**), and a **caret** (**^**) for exponents. All formulas in

Excel must begin with an **equals sign** (=). This is because the cell contains, or is equal to, the formula and the value it calculates.

Understanding cell references

While you can create simple formulas in Excel manually (for example, **=2+2** or **=5*5**), most of the time you will use **cell addresses** to create a formula. This is known as making a **cell reference**. Using cell references will ensure that your formulas are always accurate because you can change the value of referenced cells without having to rewrite the formula.

The formula in cell A3 refers to the value in cell A1 plus the value in cell A2

The formula calculates and displays the answer to the equation A1 plus A2

The formula automatically recalculates when the value of a referenced cell is changed

By combining a mathematical operator with cell references, you can create a variety of simple formulas in Excel. Formulas can also include a combination of cell references and numbers, as in the examples below:

=A1+A2	Adds cells A1 and A2
=C4-3	Subtracts 3 from cell C4
=E7/J4	Divides cell E7 by J4
=N10*1.05	Multiplies cell N10 by 1.05
=R5^2	Finds the square of cell R5

To create a formula:

1. Select the **cell** that will contain the formula. In our example, we'll select cell **B3**.

2. Type the **equals sign (=)**. Notice how it appears in both the **cell** and the **formula bar**.

3. Type the **cell address** of the cell you wish to reference first in the formula: cell **B1** in our example. A **blue border** will appear around the referenced cell.

4. Type the **mathematical operator** you wish to use. In our example, we'll type the **addition sign (+)**.

5. Type the **cell address** of the cell you wish to reference second in the formula: cell **B2** in our example. A **red border** will appear around the referenced cell.

6. Press **Enter** on your keyboard. The formula will be **calculated**, and the **value** will be displayed in the cell.

- If the result of a formula is too large to be displayed in a cell, it may appear as **pound signs (######)** instead of a value. This means that the column is not wide enough to display the cell content. Simply **increase the column width** to show the cell content.

Function

=SUM(A1:A20)

Equal sign | Function name | Argument
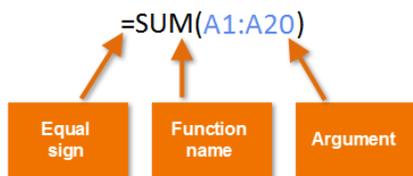
In order to work correctly, a function must be written a specific way, which is called the **syntax**. The basic syntax for a function is an **equals sign (=)**, the **function name** (SUM, for example), and one or more **arguments**. Arguments contain the information you want to calculate. The function in the example below would add the values of the cell range A1:A20.

=**SUM**(A1:A20)