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.


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 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 you have recently undone.

Content Source: GCFLearnFree.org
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.
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.

Content Source: GCFLearnFree.org
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.

   - 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 | 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 |

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.

Content Source: GCFLearnFree.org
2. Click the **Insert** command on the **Home** tab.

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.

---

**Content Source:** GCFLearnFree.org
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.

Content Source: GCFLearnFree.org
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 **cells** 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

**Content Source:** GCFLearnFree.org
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.

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:

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>=A1+A2</td>
<td>Adds cells A1 and A2</td>
</tr>
<tr>
<td>=C4-3</td>
<td>Subtracts 3 from cell C4</td>
</tr>
<tr>
<td>=E7/J4</td>
<td>Divides cell E7 by J4</td>
</tr>
<tr>
<td>=N10*1.05</td>
<td>Multiplies cell N10 by 1.05</td>
</tr>
<tr>
<td>=R5^2</td>
<td>Finds the square of cell R5</td>
</tr>
</tbody>
</table>

**Content Source:** GCFLearnFree.org
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

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)

Content Source: GCFLearnFree.org