

Introduction to Excel



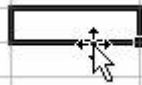
Moving around a Spreadsheet

There are three ways to move from cell to cell in Excel:

- Use the *Arrow* keys on the keyboard.
- Move the mouse pointer, which should be a large white cross, to the chosen cell, and click once with the left mouse button.
- Click in the *Name Box*, type a cell name, and press the *Enter* key.

Three Mouse Pointers

There are three mouse pointers that appear when you hover over the worksheet with the mouse. Depending upon which Mouse Pointer is visible when you click and drag with the mouse, one of three actions will occur:

| Mouse Pointer | Action |
|---|--|
|  | Thick White Cross Selects cells |
|  | Thin Black Cross Copies cell contents |
|  | Four Headed Arrow Moves cell contents |

To Edit a Cell's Contents

- Click once on the cell and begin to type. **WARNING:** This will erase anything currently in the cell!
- Double click on the cell to make the cursor appear in it to be able to edit.
- Click once in the cell, then click in the *Formula* bar and edit the cell's contents.
- Click once in the cell and press the *F2* key on the keyboard to make the cursor appear. Now edit the cell's contents.

Selecting a Range of Cells


1. Place the mouse pointer, which will look like a large white cross, on the cell where you wish to begin to highlight.
2. Click the left mouse button and hold it down as you move the mouse across the cells you want to highlight.
3. Let go of the left mouse button **ONLY** when you have selected the appropriate range of cells.
4. If you have selected too many cells, continue holding down the left mouse button and move the mouse pointer back toward the first cell selected. This will decrease the selection area.
5. If you have selected an incorrect range of cells, deselect the current range by clicking once on any one cell and begin again.

NOTE: The first cell you selected will not appear to be highlighted (black text on a blue background), however it will also have the thick black border around it and IT IS selected.

To Highlight an Entire Column or Row

- Click on the number of the row, which are in the gray boxes at the far left of the spreadsheet with your mouse pointer the thick, black arrow pointing to the right.
- Click on the letter of the column, which are in the gray boxes at the top of the spreadsheet with your mouse pointer the thick, black arrow pointing down.

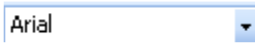


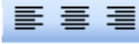





Changing the Column Width

- Adjusting with the Mouse:
 1. Put the mouse pointer on the boundary line between the gray capital letter column labels at the top of the column you want to change. The mouse pointer will change from a large white cross to a black vertical line with arrows on either side. 
 2. Hold the left mouse button down and drag until you reach the desired width, then let go of the mouse button.
- Adjusting with AutoFit:
 - Double click on the column boundary line using the double black arrow as explained above; Excel will automatically fit the column to the longest piece of information in that column.
 - Select the column by clicking on its gray letter header above the column. Then click on the *Format* button in the *Cells* group on the *Home* tab and click on *AutoFit Column Width* from the drop down menu. Excel will automatically fit the column.

NOTE: The above actions can also be applied to rows by working in the gray number label area to the left of the rows or by clicking on the *Format* button in the *Cells* group on the *Home* tab and then clicking on *AutoFit Row Height* from the drop down menu.



Formatting Cells

First, select the cells you want to format. Use the following buttons on the *Home* tab in the *Font*, *Alignment*, or *Number* groups to achieve the desired format.

| Format | Ribbon Button |
|---------------------------------------|---|
| Change Font |  |
| Change Font Size |  |
| Bold, Italics, Underline |  |
| Align Left, Align Center, Align Right |  |
| Merge & Center |  |
| Currency & Percentage |  |
| Increase/Decrease Decimal Point |  |
| Adding Borders |  |
| Change Font Color |  |

Sorting a Table

1. Select any one cell in the table, specifically in the column you want to sort by.
2. Click on the *Data* tab on the *Ribbon* and then move to the *Sort & Filter* group.
3. Click on the button for the type of sorting you would like to do:

-  is A to Z, 1 through 10, and oldest date to most recent date
-  is Z to A, 10 through 1, and most recent date to oldest date

Writing Formulas

- Formulas always begin with an **Equal** sign (=) and can include cell names and numbers.

| Operation | Formula/Function | Notes |
|----------------|-----------------------|-----------------------------------|
| Addition | =A1+B1 or =A1+10 | |
| Subtraction | =B1-C1 or =(B2-5)*D2 | |
| Multiplication | =A1*G8 or =A1*3 | The * is used for multiplication. |
| Division | =A10/B2 or =(A6+D6)/3 | The / is used for division. |

- Cell names can be written using upper or lower case letters.
- Parentheses are used to indicate which part of a formula is calculated first.
- After the formula is typed, press the *Enter* key to have the answer computed. The answer is displayed in the cell and the formula is displayed in the *Formula* bar when the cell is selected.

Entering Formulas

- There are two ways to enter formulas. The first is to type the equal sign and cell references along with the math symbols as in the above examples using the keyboard.
- The second method is to use **Point & Click**. This method can be faster and more accurate. The **Point & Click** method is a combination of using the mouse to select the cells (Excel will automatically fill in the cell reference) and keyboard to type in the symbols = () * / + -.
- For example, to enter in cell D1 the formula =A1*B1*C1 follow these steps in order:
 1. Click on cell *D1* to make it your active cell
 2. Press = key on the keyboard
 3. Click once on cell *A1*
 4. Press * key on the keyboard
 5. Click once on cell *B1*
 6. Press * key on the keyboard
 7. Click once on cell *C1*
 8. Press the *Enter* key on the keyboard
- When using the **Point & Click** method it is **VERY IMPORTANT** to press a key such as () * / + - or *Enter* on the keyboard to **LOCK** in the cell reference in the formula. In the example above, if you do not press * after clicking on cell *A1* then the reference to cell *A1* will become *B1* instead.

Relative References & Using the AutoFill Feature

Relative References adjust when formulas containing them are copied usually using the AutoFill feature. For example, in the spreadsheet below, instead of retyping a formula similar to the one in cell *D2* for the next three rows, you can use the AutoFill handle. This will duplicate the formula, but make it specific for the new cells in which the formula will be located.

| | A | B | C | D |
|---|--------|----------|------|------------|
| 1 | | Quantity | Cost | Total Cost |
| 2 | Desks | 5 | 200 | =B2*C2 |
| 3 | Chairs | 2 | 300 | |
| 4 | Lamps | 10 | 50 | |
| 5 | Sofas | 6 | 300 | |
| 6 | | | | |

To Use AutoFill:

1. Click on the cell containing the formula, in the above example this would be cell *D2*.
2. Locate the black square which is the *Fill handle* in the bottom right corner of the selected cell.
3. Place your mouse pointer directly on the black square handle. When this is done correctly, your mouse pointer will change to a thin, black cross.
4. With this mouse pointer, click, hold down the left mouse button and drag the mouse so that you are selecting all the cells in which you would like the formula duplicated. In the above example this would include cells *D3* thru *D5*.
5. When you have selected the appropriate group of cells, let go of the left mouse button and the formula will automatically be entered into those cells as seen in the example pictured below. When the formula from *D2* was copied to *D3*, *D4*, and *D5*, Excel adjusted the cell references to match the location for that row. These are examples of Relative Cell References.



| | A | B | C | D |
|---|--------|----------|------|------------|
| 1 | | Quantity | Cost | Total Cost |
| 2 | Desks | 5 | 200 | =B2*C2 |
| 3 | Chairs | 2 | 300 | =B3*C3 |
| 4 | Lamps | 10 | 50 | =B4*C4 |
| 5 | Sofas | 6 | 300 | =B5*C5 |
| 6 | | | | |