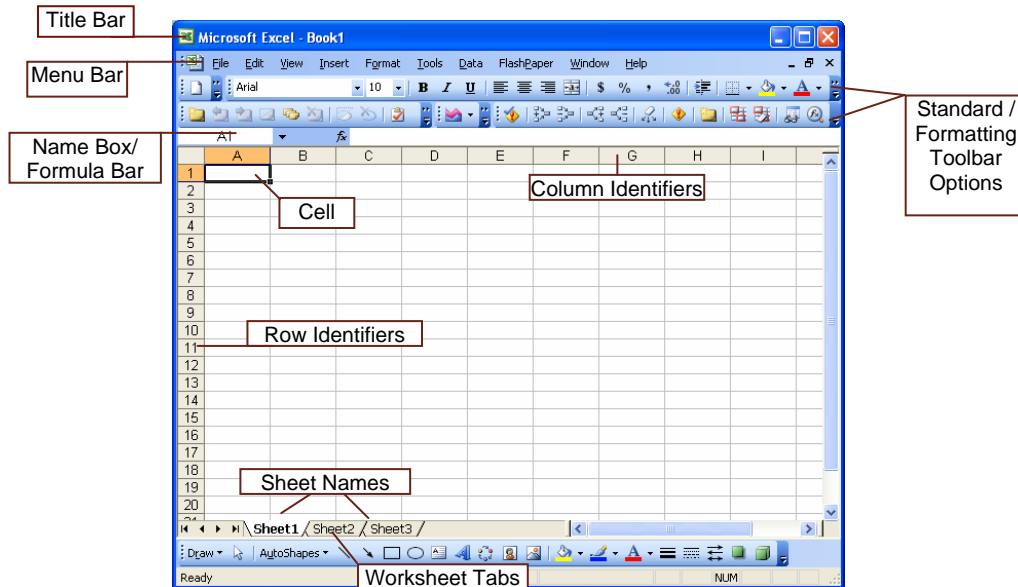



Microsoft® Excel is a spreadsheet program, which allows you to enter numerical values or data into rows or columns of a spreadsheet, and to use these values for organizing data, performing various calculations, graphs, or statistical analysis.




## Excel Basics

When you first open Excel, a new “workbook” is created for you. By default, a workbook consists of three “worksheets.” A worksheet is a page in your workbook. You can easily toggle between worksheets by clicking on any of the worksheet tabs (Sheet 1, Sheet 2, or Sheet 3).

### Creating a New Document

1. From the **File** menu, select **New**, or **Ctrl+N** on the keyboard.
2. From the New Document section, select **Blank Workbook**, or
3. On the Formatting toolbar, click the New Blank Document button. 

### Opening an Existing Document


1. From the File menu, select **Open** or **Ctrl+O**, or
2. On the Standard toolbar, click the Open button. 
3. Locate the file to be opened, click **Open**.

### Saving a Document for the First Time


1. From the **File** menu, select **Save As**.
2. The Save As dialog box will open.
3. From the Save in drop-down list, select the appropriate location for your document.
4. In the File name text box, type a descriptive file name.
5. Click **Save**.

## Resaving a Document

Follow the above instructions for a new document. To resave an existing document,

1. From the **File** menu, select **Save** or **Ctrl+S**, or 
2. On the Standard toolbar, click the Save button.
3. The document will be saved under the existing file name.
4. To resave the document using a different name, follow the instructions for saving a document for the first time.

## Printing a Document

1. Previewing your document prior to printing gives you a better visual sense of how the document will look on paper. To preview your document, from the **File** menu, select **Print Preview**. If you're happy with how it looks, you can print directly from the Print Preview screen by clicking on the **Print** button.
2. You can also print your document by clicking on the Print button located on the toolbar. If you use the Print button, the entire document will print. To have more control over your printing options: 
  - a. In the Standard document window, from the File menu, select **Print**.
  - b. The Print dialog box will open.
  - c. Select the desired printer as well as the printing options for your document, i.e., number of pages, number of copies etc.
  - d. When you are finished setting your print options, click **OK**.

## Toolbars

Beyond the Standard toolbar, there are several toolbar options available in Excel. When you open Excel for the first time, the Standard toolbar and the Format toolbar are displayed at the top.



Standard Toolbar



Format Toolbar

To view additional toolbars, select **View | Toolbars**, and select from any of the toolbar options.

## Formula Bar:

The Name Box displays the active cell, or, is used to name a group of cells (Range), for use with formulas. The formula bar is where you'd enter a formula for a selected cell, or shows the existing formula in the selected cell.



Name Box

Formula

## Adding, Deleting, Renaming, Hiding and Unhiding a Worksheet

If you find that you routinely use only one worksheet or more than three, you can adjust the number of default worksheets by choosing **Tools** on the menu bar | **Options**, then clicking on the **General** tab and changing **Sheets In New Workbook** from one to a maximum of 255 worksheets.

## Add a Worksheet

1. Choose **Insert | Worksheet** from the Menu bar. Or, right click a worksheet tab and choose **Insert**. Double click the tab name to rename the worksheet if desired.

## Delete a Worksheet

1. Right click the worksheet you want to delete. From the Shortcut menu, choose **Delete**.

## Rename a Worksheet

1. Double click a Worksheet tab, then type a new name and press Enter.

## Hide a Worksheet

1. Click on the worksheet tab.
2. Choose **Format** from the Menu bar | **Sheet** | **Hide**.

## Open a Hidden Worksheet

1. Choose **Format** from the Menu bar | **Sheet** | **Unhide**. From the list of hidden worksheets listed in the Unhide dialog box, select the hidden sheet you want to open and click **OK**.

## Change the Order of Worksheets

1. Click and drag any worksheet tab left or right, or
2. Right click a tab and choose **Move** or **Copy** from the list of options.
3. In the Move or Copy dialog box, select a location from the Before sheet list and click **OK**.

## Copy a Worksheet

1. Follow steps 2 and 3 above, or
2. **Ctrl**-click the worksheet, then drag the worksheet to the new location. A black arrowhead will point to where the copied worksheet will go.
3. Release the mouse and then the Ctrl key.
4. Rename the copied worksheet (see Rename a Worksheet above).

## Color Code Worksheets

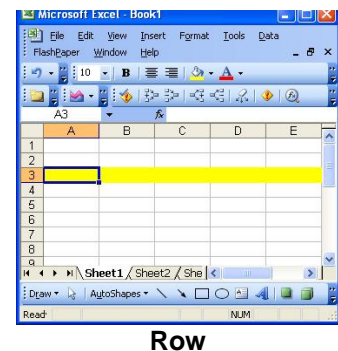
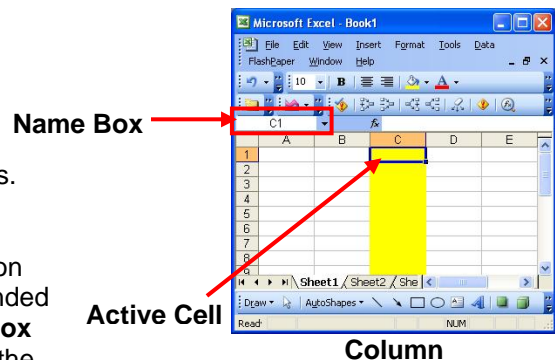
1. Select a tab.
2. Choose **Format** | **Sheet** | **Tab Color**.
3. Choose a color from the Format Tab Colors Dialog Box, or
4. Right click the tab and choose **Color Tab**.
5. Choose a color from the Format Tab Colors Dialog Box.

## Moving Around a Worksheet

One worksheet can have up to 256 columns and 65,536 rows. Within a worksheet, data can be entered in rows or columns.

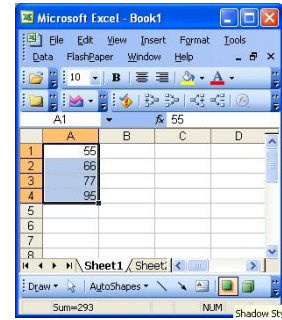
Position the mouse over a cell, then click the left mouse button to make the cell active. You will notice the cell will be surrounded by a black border, indicating it is the active cell. The **Name Box** located on the Formula Bar will display the cell reference. In the example to the right, cell C1 is the active cell.

1. From there, you can use the **arrow** keys to move one cell left, right, below or above.
2. The **Enter** key will move the active cell down one cell.
3. The **Tab** key will move the active cell to the right one cell.
4. **Page Up** or **Page Down** will move the active cell either up or down one full screen.
5. The **Home** key will move the active cell to column A of the current row.
6. Press **Ctrl+Home** to go to cell A1.



## Selecting a Group or Range of Cells

To select a group or range of cells, click on the cell in the very top left corner of the selected range, and drag the mouse over the cells to be included. In the example to the right, the selected range is A1:A4.



## Formulas and Functions

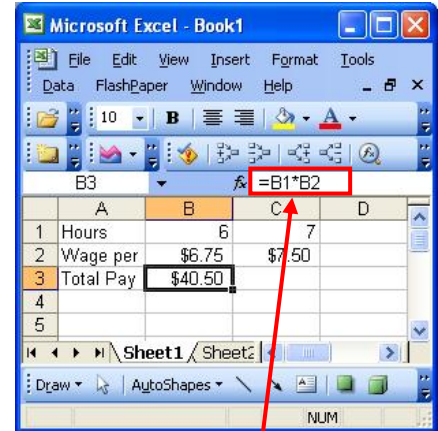
The following examples provide a very basic understanding of the use of formulas in Excel.



**AutoSum Button** – To total a range of cells, click the cell where you want to enter the total. Using the example above, click on cell A5. Click the **AutoSum** button on the Standard toolbar. Verify that the cell range selected is correct (using our example, the cell range would be cells A1:A4), and press Enter. The four numbers will automatically be totaled, with the answer provided in cell A5.

### Example:

- To create a basic formula, enter the same information shown in the examples to the right. Select the cell where you want the results of the calculation to be performed (cell B3). **\*\*You must always select an empty cell to perform a function – generally directly below a column of values, or to the right of a row of values.**
- In the formula bar, referencing the existing data (values) contained in the worksheet, create a formula that will calculate the total pay for the person working 6 hours at \$6.75 per hour:



Formula Bar

**=B1\*B2** (hit enter). The asterisk (\*) is the operator for multiplication. The results will be displayed in cell B3 (6 hours x \$6.75/hour = 40.50)

The following table provides examples of various functions that can be performed using the example above:

Function	Operator	Value	Formula	Result
<b>Multiplication</b>	*	= 5 * 3	= A1 * B1	15
<b>Division</b>	/	= 8 / 4	= A3 / B2	2
<b>Addition</b>	+	= 7 + 4	= A2 + B2	11
<b>Subtraction</b>	-	= 8 - 3	= A3 - B1	5

In an upcoming reference guide, we will delve further into the use of formulas in worksheets, including the use of the form wizard.

## Keyboard Shortcuts

Ctrl+O	Open an Existing Workbook
Ctrl+N	Open a New Workbook
Ctrl+Home	Go to First Cell (A1) in Worksheet
Ctrl+End	Go to Last Cell in Working Area
↑ ↓ ← →	One Cell Up, Down, Left, or Right
Tab	Move Between Cells in a Selected Range
Home	Go to Beginning of Row
Page Up/Page Down	Scroll Up or Down a Screen
Alt+Page Up/Page Down	Scroll Left or Right a Screen
Ctrl+Page Up/Ctrl+Page Down	View Previous or Next Worksheet