



Excel Basics

Tips & Techniques

Excel Terminology

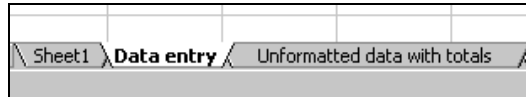
What’s a spreadsheet? What’s a workbook?

Each Excel spreadsheet is a grid of data divided into rows and columns. Each block in this grid is called a **cell**, and it can hold an individual piece of text or data. Each Excel file/document is considered a spreadsheet, although Excel also uses the term “**workbook**” to refer to a spreadsheet document.

	A	B	C	D
1	Sales Comparison, in dollars			
2				
3	Agent	January	February	March
4	Jack	1243	2241	2254
5	Alexis	3230	4000	3998.87
6	Max	2541.23	2456.66	2555.99
7	Samantha	4421.01	5000	5676.99
8				

What’s a worksheet?

Excel permits data to be organized over a number of “pages” within each spreadsheet. Each of these pages is a **worksheet**, and each one has a labeled tab that displays at the bottom of the Excel window. Spreadsheets can contain one or more worksheets, and you can click on a worksheet’s tab to view its contents.



Navigating around your spreadsheet

Finding the active cell

Excel will place any new data in your spreadsheet's **active cell**. This cell is marked with a thick, dark border.

	A	B	C
1			
2			
3			
4			

Changing the active cell

There are several ways to make a new cell active so that you can insert text or data into it.

- Click on a cell to make it active.
- Use the tab key. Each time you type the tab key, the active cell moves one cell to the right in the current row.
- Use the shift key-tab key combination. Each time you hold down the shift key and type the tab key, the active cell moves one cell to the left in the current row.

Referring to a cell

Every cell is designated with a **combination of a letter (drawn from the cell's column) and a number (drawn from the cell's row)**. This cell reference is useful in identifying a cell for your own information as well as in formulas and functions.

- *For example, in the image on this page, the active cell's reference is **B2**, since the cell is in **column B** and **row 2**.*

Selecting multiple cells

To select multiple cells for use in a calculation, or to move the data in those cells to a new location, drag your mouse across those cells. You'll probably have the most success if you drag your mouse from the top corner to the bottom corner of your block of cells.

Creating a basic spreadsheet

Entering data

- Click in the cell that will contain your new data.
- Once this cell is active, type your new data into the cell.

	A	B	C
1			
2		some data	
3			

- After you have finished entering your data, use the **tab** key (or another method) to move the active cell to another part of your spreadsheet.

Editing existing data

- Click on the cell that contains the data that you want to edit.
- To **replace the existing data**, type your new data into the cell.
- To **change the data in the cell**, doubleclick on the cell.
- Excel will then allow you to make changes to the contents of that cell as if it were a Word document.
 - To **replace part of the data** in that cell, drag the mouse to select the data to replace. Then, type the new data.
 - To **delete part of the data** in the cell, select the data and then type the **backspace** or the **delete** key on your keyboard.

Cutting, copying, and pasting data

- **Select the cell or range of cells** containing the data to be cut or copied. The selected range will have a **black border** around it.
 - **Cutting** your data will move it from its current cell to its new cell.
 - **Copying** the data will keep one copy in its current cell and another in its new cell.

	A	B	C
1			
2		some data	
3		more data	
4		extra data	
5			

- To cut the data, click on **Cut** on the standard toolbar at the top of the Excel window.



- To copy the data, click on **Copy**.



- Click in the destination cell for your data.
- Click on **Paste**.



Tip: Cut, copy, and paste shortcuts

To simplify this process, use the following keyboard shortcuts.

- **Control-X:** Cut
- **Control-C:** Copy
- **Control-V:** Paste

*The cut, copy, and paste commands are also available from the **Edit** menu.*

Using formulas & functions

Excel makes use of **formulas** (mathematical expressions that you create) and **functions** (mathematical expressions already available in Excel) to dynamically calculate results from data in your worksheets.

Creating a simple formula

- To start **entering a formula in a cell**, click in that cell and then type the formula. Type **return** or **tab** to move to the next cell when you have finished entering the formula.
- All formulas begin with the = symbol.
- All formulas use the following mathematical operators:
 - * *multiplication*
 - / *division*
 - + *addition*
 - - *subtraction*
- **Formulas containing numbers** will produce a result that will not ever change.
 - *The formula =3*8 produces the result 24.*
- However, **a formula containing cell references** produces a result that may change if the data in those cells changes.
 - *The formula =C3+D3 will produce a result based upon the data in cells C3 and D3.*

	A	B	C
1			
2		=C3+D3	
3			
4			

- If a part of a formula is in **parentheses**, that part will always be calculated **before the rest of the formula**.
 - *The formula =(B2*C2)-A3 will subtract data in cell A3 from the multiplied product of cells B2 and C2.*

Using the Sum function

Sum, one of the most commonly used functions, will produce a sum of the values in a range of cells.

- To start entering a function in a cell, click in that cell and then type the function. Type **return** or **tab** to move to the next cell when you have finished entering the function.
- All functions begin with the = symbol.
- The sum function should look as follows:
 - =**sum(A1:A4)**
 - **A1:A4** refers to the range of cells beginning with cell **A1** and finishing with cell **A4**.

	A	B	C
1			
2		=sum(A1:A4)	
3			
4			

Tip: Function shortcut

- *Instead of typing the entire function:*
 - =Type =**sum(**
 - Drag to **select the range of cells** to include in your function. After you select this range, there will be a *blinking dashed border* around it.

	A	B	C
1			
2		=sum(A2:A4)	
3			
4			
5			

- Type **)** to complete the function. Type **tab** or **return** to move to the next cell.

Using AutoSum

The AutoSum feature allows you to quickly create sums without typing any function syntax at all.

- **Click in the cell** that will contain your AutoSum.
- Click on the AutoSum button on the standard toolbar.



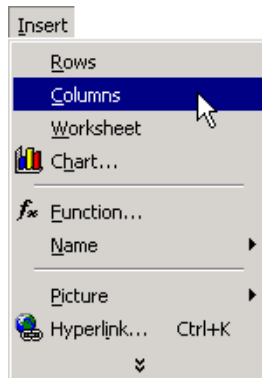
- Drag to **select the range of cells** to be summed.
- Type **return** to complete the AutoSum.

Formatting columns & rows

Often, an Excel spreadsheet may not be configured to cleanly display your data. In addition, it may look downright boring. Excel provides several tools to make your worksheets more presentable.

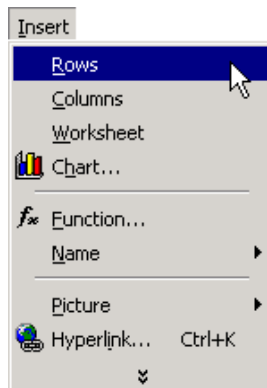
Inserting columns

- Excel always inserts columns **to the left of the active cell**.
- To insert a new column, click to **select an active cell** in the correct position in your worksheet.
- From the **Insert** menu, select **Columns**.
- Excel will insert your new column.



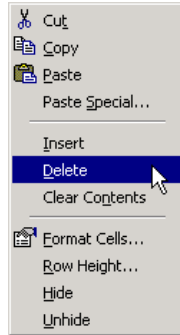
Inserting rows

- Excel always inserts rows **above the active cell**.
- To insert a new column, click to **select an active cell** in the correct position in your worksheet.
- From the **Insert** menu, select **Rows**.
- Excel will insert your new row.



Deleting columns & rows

- **Right-click** on the **letter at the top of the column** that you want to delete or the **number at the left of the row** that you want to delete.
- From the pop-up contextual menu, choose **Delete**.

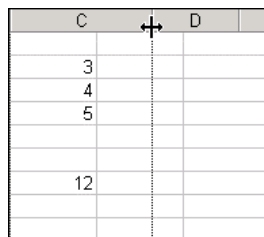


- Excel will delete the column or row you selected and shift the rest of your data to fill the space formerly occupied by that column.

Resizing columns

In many situations, a cell will be too wide or too narrow to properly display the data it contains. In these situations, you can resize the cell's column so that the data will display correctly.

- To resize a column to a new width, **place your cursor on the gridline** between the column to be resized and the next column to the right.
 - When the cursor is in position on the gridline, you'll see a **special double-arrow cursor** indicating that Excel is ready to resize the column.
- **Drag the column gridline left or right** to resize the column. Release the mouse button when the column is at the width you want.



Tip: Doubleclick on the gridline between two columns to force Excel to optimally resize the column to the left of your cursor.

Resizing rows

- To resize a column to a new height, **place your cursor on the gridline** between the row to be resized and the row below it.
 - When the cursor is in position on the gridline, you'll see a **special double-arrow cursor** indicating that Excel is ready to resize the row.
- **Drag the column gridline up or down** to resize the row.

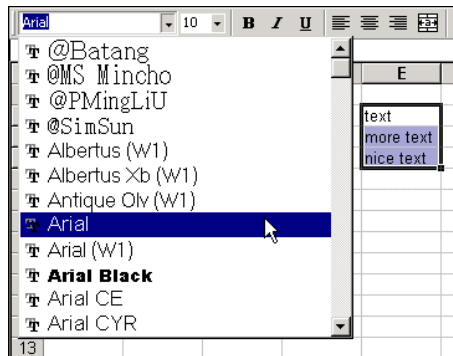
***Tip:** Doubleclick on the gridline between two rows to force Excel to optimally resize the row above your cursor.*

Formatting text inside cells

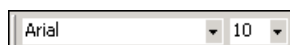
Excel provides many capabilities for formatting text and data within cells. These text formats allow you to transform a spreadsheet that is nearly unreadable to one that is attractive and persuasive.

Changing the font and size of your text

- **Select the cell or range of cells** to receive the new text formatting.
- **To change the font**, click on the down-facing arrow next to the font menu on the formatting toolbar.
- **Click on the name of the font** that you want to use for your text.



- **To change the size of your text**, click on the down-facing arrow next to the font size menu on the formatting toolbar. Click on the text size you want.



Adding bold, italic, and underline formatting

- **Select the cell or range of cells** to receive the new text formatting.
- To apply bold, italic, or underline formatting, click on **the appropriate button** (shown below) on the formatting toolbar.



bold



italic



underline

Aligning text within a cell

- **Select the cell or range of cells** to receive the new text formatting.
- To apply left, right, or center alignment to your text, click on **the appropriate button** (shown below) on the formatting toolbar.



left alignment



center alignment

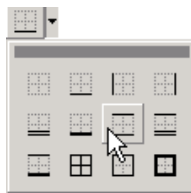


right alignment

Formatting borders and colors

Applying borders

- **Select the cell or range of cells** to receive the new text formatting.
- **Click on the down-facing arrow** next to the **border** button on the formatting toolbar.
- **Select the border** to surround the selected cell or cell range.



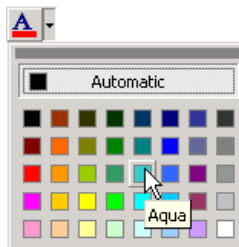
Applying a background color

- Select the cell or range of cells to receive the new text formatting.
- Click on the down-facing arrow next to the **background color** button on the formatting toolbar.
- Select the color that you want.



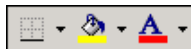
Changing the color of your text

- Select the cell or range of cells to receive the new text color.
- Click on the down-facing arrow next to the **text color** button on the formatting toolbar.
- Select the color that you want.



Tip: Applying an already selected border or color

- *On the border button, the border you selected last will be displayed next to the down-facing arrow.*
- *On the text and background color buttons, a colored bar at the bottom of the button will display the last color you selected.*



To apply an already-selected color or border, select the cells to receive the formatting, and click on the toolbar button you want.