

Excel 2004 for Mac: Basics

Learning guide

Excel terminology

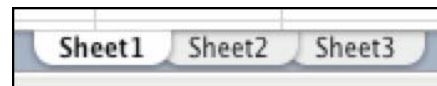
What is a spreadsheet?

A **spreadsheet**, also known as a worksheet, is a grid of data divided into *numbered rows* and *lettered columns*. Each block in the grid is called a **cell**, which holds an individual piece of text or data.

	A	B	C	D
1	Sales Comprison, in dollars			
2				
3	Agent	April	May	June
4	Michaela	4200	6000	9999
5	John	1000	7000.25	3000
6	Erin	5000.9	4092.34	1610.88
7	Michael	3690	4578.98	8934

What is a workbook?

A **workbook** is a file or document that is composed of multiple spreadsheets. Within a workbook, spreadsheets are organized by labeled tabs displayed at the bottom of the excel window.

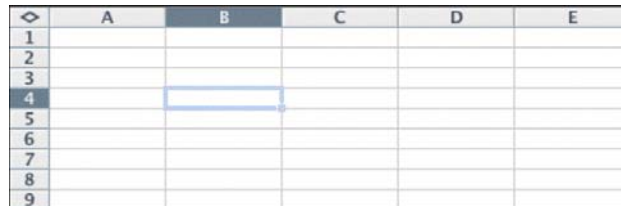


- Your workbook can contain as many spreadsheets as you want. By default, all new Excel workbooks have three spreadsheets.
- To view the contents of a spreadsheet, click on its tab.

Navigating around your spreadsheet

Finding the active cell

- Excel will place any new data in the spreadsheet's **active cell**.
- A thick light blue border surrounds any active cell or range of cells. *Excel highlights the lettered column and numbered row headings for any active cell or range of cells.*



	A	B	C	D	E
1					
2					
3					
4					
5					
6					
7					
8					
9					

Referring to a cell

Every cell is identified by a **letter** and a **number** combination. To name a cell:

- Identify the **letter** of the cell's column
- Identify the **number** of the cell's row
 - *In the image above, for example, the active cell's reference is **B4** since the cell is in **column B** and **row 4**.*

Changing the active cell

Use one of the techniques listed below to change the active cell.

- Click on the cell you wish to make active.

Type . . .	To move the active cell . . .
Tab	One cell to the right in the current row
Shift + Tab	One cell to the left in the current row
Return	One cell down in the current column
Shift + Return	One cell up in the current column
Up Arrow	One cell up
Right Arrow	One cell to the right
Down Arrow	One cell down
Left Arrow	One cell to the left

Selecting multiple cells

To select multiple cells for use in a calculation, or to move the data in the cells to a new location, drag your mouse across the cells.

You will have the most success if you drag your cursor from the top corner to the bottom corner of the block of cells.

Tip: To move data in the selected cells to a new location, position your cursor at any edge of the selected cell or range of cells. When the cursor changes to a hand, you may move the cell(s).



Creating a basic spreadsheet

Entering data

- Click to select the cell where you wish to enter your data.
- Type the new data into the cell.

1			
2			
3		basketball	
4			
5			

- Use the techniques listed in the section labeled **Changing the active cell** to move the active cell to another part of your spreadsheet.

Editing existing data

Excel allows you to edit data in your cells just as you would in a Word document.

Replacing existing data

To replace old data in the cell:

- Click the cell you wish to edit.
- Begin typing new data into the cell. *This will replace the old data in the cell with the new data.*

Changing existing data

To edit the existing data within a cell:

- Double-click on the cell that contains the data you wish to edit. A cursor will appear.
- To replace only part of the data within the cell:
 - Highlight the text you wish to change.
 - Begin typing in your new data.
- To delete part of the data within a cell:
 - Highlight the appropriate section.
 - Type the **delete** key.

	A	B	C
1			
2			
3		basketball	
4			
5			

Cutting, copying, and pasting data.

Cutting data

Cutting your data will delete it from its current cell and paste it into a new cell. To cut the data:

- Select the cell or range of cells containing the data you want to be cut.
- Click on the **Cut** button located on the standard toolbar.



- Click on the cell where you wish to insert the data.
- Click the **Paste** button.



Tip: If you are pasting a range of cells, you should still select only one destination cell. This cell will become the top left cell of the new pasted cell range.

Copying data

Copying the data will keep one copy in the current cell, or range of cells, and insert another in a new location. To cut the data:

- Select the cell or range of cells containing the data you want to be copied.

- Click on the **C**opy button located on the standard toolbar.

Tip: The data will be lost unless you copy it before deleting.



- Click on the cell where you wish to insert the data.

- Click the **P**aste button.



Tip: Cut, copy, and paste shortcuts

To simplify this process, use the following keyboard shortcuts:

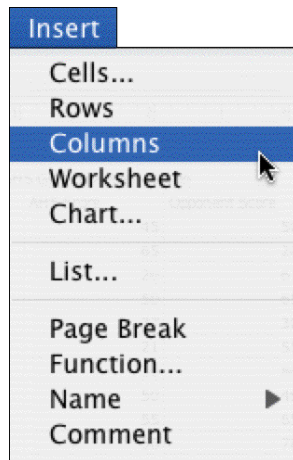
To . . .	Type . . .
Copy	Control-C
Cut	Control-X
Paste	Control-V

Formatting columns and rows

Sometimes your spreadsheet may not efficiently display your data; or it may look downright boring. In this situation, you can format your spreadsheet to make it look more presentable.

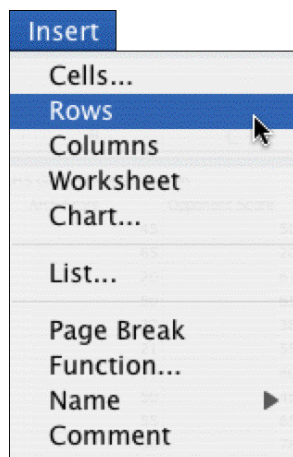
Inserting columns

- Click on a cell to the right of where you wish to insert a new column.
- From the **Insert** menu, select **Columns**.
- Excel will insert a new column to the left of the active cell.



Inserting rows

- Click on a cell below where you wish to insert a new row.
- From the **Insert** menu, select **Rows**.
- Excel will insert a new row above the active cell.

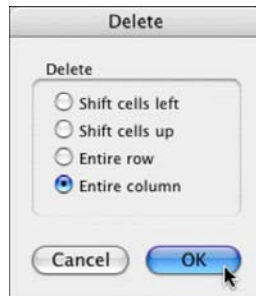


Deleting columns and rows

Occasionally you may insert extra rows of columns and need to delete them.

Deleting columns

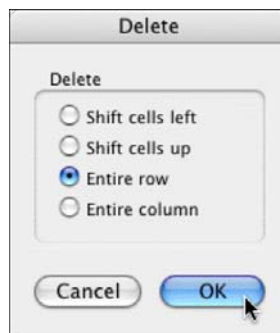
- Click on a cell that is in the column you wish to delete.
- From the **Edit** menu select **Delete**.
- The **Delete** window will appear.
- Click on the radio button labeled **Entire column**.



- Click on the button labeled **OK**.
- Excel will delete the column from your spreadsheet and shift your data to the left by one column.

Deleting rows

- Click on a cell that is in the row you wish to delete.
- From the **Edit** menu select **Delete**.
- The **Delete** window will appear.
- Click on the radio button labeled **Entire row**.



- Click on the button labeled **OK**.
- Excel will delete the row from your spreadsheet and shift your data up one row.

Tip: Deleting multiple rows or columns

To delete multiple rows or columns the same procedure may be used. Simply select the rows or columns you wish to remove, and follow the steps outlined above.

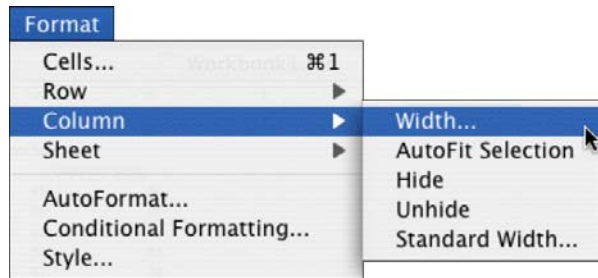
Resizing columns and rows

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 width so that the data will be displayed correctly.

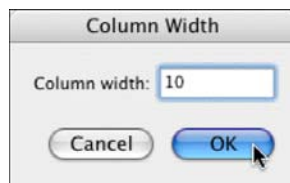
Resizing columns

To resize a column to a new width:

- Select the column you wish to resize.
- From the **Format** menu, select the **Column** submenu.
- From the **Column** submenu, select **Width**.



- A window labeled **Column Width** will appear.
- In the box labeled **Column width**, type the desired width for the column.
- Click on the button labeled **OK**.

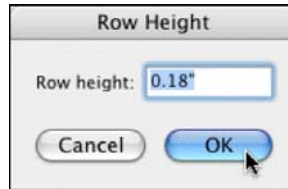


Tip: You can resize a column to fit the text in a cell exactly. Select an entire column by clicking on the lettered heading. Move the cursor to the right edge of the highlighted lettered heading and double-click. Excel will automatically resize the column width to fit the cell with the most data.

Resizing rows

To resize a row to a new height:

- From the **Format** menu, select the **Row** submenu.
- From the **Row** submenu, select **Height**.
- A window labeled **Row Height** will appear.
- In the box labeled **Row height**, type the desired height for your column.
- Click on the button labeled **OK**



Formatting text inside cells

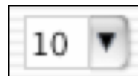
Excel provides many capabilities to format text and data within cells. These formats allow you to transform a raw spreadsheet into a clear and persuasive presentation of data.

Changing the font and size of your text

- Select the cell or range of cells you wish to reformat
- To change the font:
 - Click on the down-facing arrow next to the **font** menu located on the formatting toolbar.
 - Click on the name of the font you wish to apply to your text.






- To change the size of your text:
 - Click on the down-facing arrow next to the **font size** menu located on the formatting toolbar.
 - Click on the text size you wish to apply.






Adding bold, italic, and underlining formatting

- Select the cell or cell range you wish to format.
- Click on the one of the buttons below to add text formatting.

Click on. . .	To add. . .
	Bold formatting
	Italic formatting
	Underlining

Aligning text within a cell

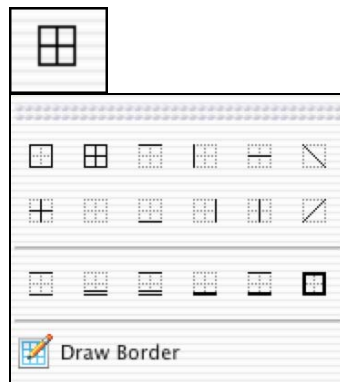
- Select the cell or range of cells you wish to receive the new text formatting.
- Click the one of the buttons below to change the alignment of your text.

Click on . . .	To . . .
	Align text to the left margin
	Align text in the center
	Align text to the right margin

Formatting borders and colors

Applying borders

- Select the cell or range of cells you wish to add a border to.
- Click on the down-facing arrow located next to the **border** button on the formatting toolbar.
- Select the border you wish to apply.



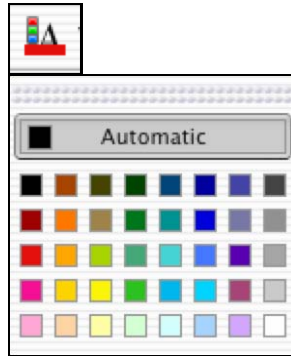
Applying a background color

- Select the cell or cell range you wish to add a background color to.
- Click on the down-facing arrow located next to the **Fill Color** button on the formatting toolbar.
- Select the background color that you wish to apply.



Changing the color of your text

- Select the cell or range of cells you wish to receive the new text color.
- Click on the down-facing arrow next to the **Font Color** button on the formatting toolbar.
- Select the font color you wish to apply.



Tip: Applying a previously selected border, background or font color

*On the **Borders** button, the last selected border will be displayed next to the down facing arrow. On the **Font** and **Fill Color** buttons a colored bar at the bottom of the button will display your last color selection.*



To apply a previously selected border, background or font color:

- *Select the cell or range or cells to receive the formatting.*
- *Click on the formatting toolbar button you wish to use.*

Inserting a function

Calculating a sum

The **summation** function, one of the most commonly used functions in Excel, produces a sum of the values in a range of cells.

To calculate a sum:

- Click on the cell where you wish to display the summation results.
- To begin your function type `=sum(`.
- Type the range of cells you wish to add together
- To finish your function type `)`.
- Type the **Return** key to calculate the result
- If you want to find the sum of a range of cells beginning with cell **A1** and ending with cell **A4**, for example:
 - Type `=sum(A1:A4)`.
 - The cells that you wish to sum will be enclosed in a dashed border as you type your formula.

	A	B	C	D
1				
2		=SUM(A1:A4)		
3		SUM(number1, [number2], ...)		
4				
5				

Tip: Sum function shortcut

- *Instead of typing the entire function in the cell, type `=sum(`.*
- *Click to select the range of cells you wish to sum. A blinking dashed border will appear around the cell range.*
- *Type `)` to complete the function.*
- *Type the tab or return button to move to the next cell.*

Calculating a sum using the AutoSum tool

Excel's AutoSum tool allows you to quickly create sums without needing to type any function syntax. To calculate a sum:

- Click in the cell where you want to display your sum.
- Click on the **AutoSum** button located on the standard toolbar.



- Select the range of cells that you want to be summed.
- Type the **Return** key to complete the calculation.

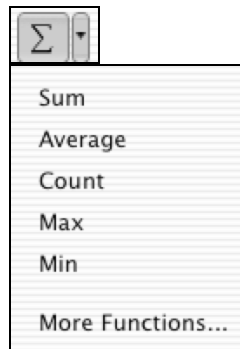
Calculating other functions using the AutoSum button

The AutoSum button also allows you to quickly calculate several other common functions (each of which is a ready-to-insert mathematical formula). These common functions are summarized in the table below.

Function name	Result
Sum	The total value of a range of cells
Average	The average value of a range of cells
Count	Counts the number of cells in a range that contain a numeric value
Max	Finds the largest value in a range of cells
Min	Finds the smallest value in a cell range

Inserting and AutoSum function:

- Click in the cell where you wish to display your result.
- Click on the down-facing arrow to the right of the **AutoSum** button.
- From the menu that appears, select the name of the function you wish to insert.



- Select the range of cells you wish to use in your calculation.
- Type the **Return** key to calculate your result.

Constructing a formula

Guidelines for creating formulas

- All formulas within a cell begin with the = symbol.
- Excel uses the following symbols as mathematical operators.
 - * *multiplication*
 - / *division*
 - + *addition*
 - *subtraction*
- Excel calculates your formula:
 - From left to right
 - Starting with any *multiplication* and/or *division*
 - Followed by *addition* and/or *subtraction*.
- If you need to perform a calculation that does not follow this order, use parentheses to indicate which part of your formula should be calculated first.
 - For example, in the formula $= (8-3)*4$, Excel will perform the subtraction enclosed in parenthesis before the multiplication.
- You can create formulas by using numbers to produce a result that will not change when the data in your spreadsheet does.
 - The formula $=3*8$ produces the result **24**
- You can also create formulas using cell references so that the result that will change if the data in those cells changes.
 - The formula $=A1+C1+B2$ produces a result based upon the data in cells **A1**, **C1**, and **B2**.

	A	B	C	D
1				
2				
3			=A1+C1+B2	
4				

A function example

- To calculate: $10 \times (5-2) - \frac{18}{9} =$
 - Click in the cell into which you wish to enter your formula.
 - Type $=10*(5-2)-18/9$.

	A	B	C
1			
2		=10*(5-2)-18/9	
3			
4			

- Type the **Return** or **Tab** key to complete the calculation.

Getting help in Excel

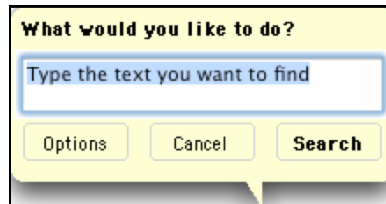
Excel's Help index is a good resource when you are trying to use an unfamiliar feature or starting a new project.

To seek help in Excel:

- From the **Help** menu select **Use the Office Assistant**.
- A **computer man** window will appear on your screen. *Use the grey bar on the left-hand side of the window to move the window anywhere on your desktop.*



- Click anywhere in the computer man window.
- A yellow box labeled **What would you like to do?** will appear.



- In the highlighted blue box type in your question.
- Click on the button labeled **Search**.
- Excel will search for Help topics that relate to the task or feature in your query. All relevant topics will be displayed in the task pane at the right side of the Excel window.
- Choose a topic that seems most relevant.
- Click on the name of the topic to display its contents.
- Excel will display a new window containing the text of the Help topic you selected.

*Tip: You can also use the **Help** menu at the top of the screen. Select **Excel help** from the drop-down menu. In the window that appears you can search the Excel help contents, index, as well as glossary of terms.*