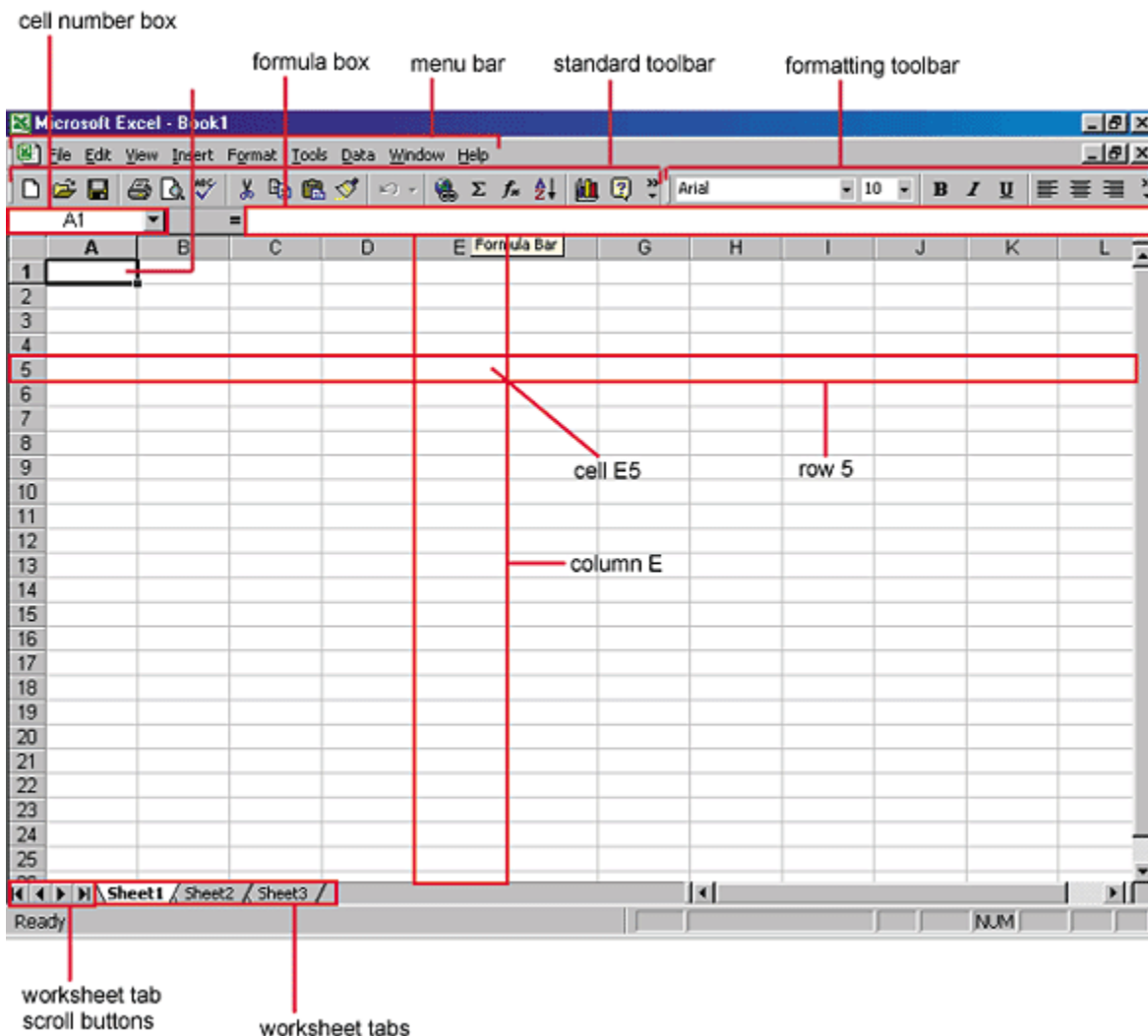


Introduction to Microsoft Excel

Excel is a spreadsheet program, which is designed to help you record, analyze and present quantitative information. The file you create and save is called a workbook. It contains a collection of worksheets, which look similar to an accountant's ledger sheets.

Excel files end in the extension .xls

Excel allows you to create spreadsheets much like paper ledgers that can perform automatic calculations. Each Excel file is a **workbook** that can hold many **worksheets**. The worksheet is a grid of **columns** (designated by letters) and **rows** (designated by numbers). The letters and numbers of the columns and rows (called **labels**) are displayed in gray buttons across the top and left side of the worksheet. The intersection of a column and a row is called a **cell**. Each cell on the spreadsheet has a **cell address** that is the column letter and the row number. Cells can contain text, numbers, or mathematical formulas.



Starting Microsoft Excel

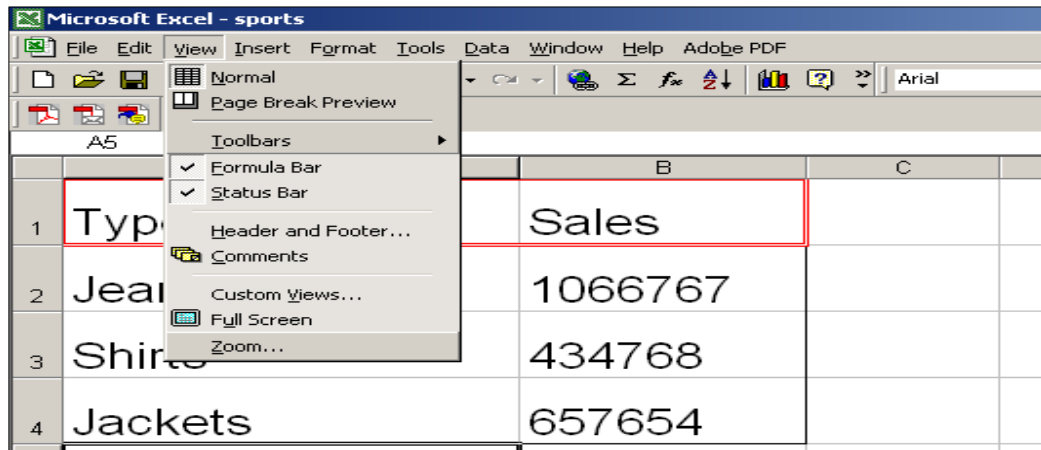
Click the START button on the menu bar. Point to ALL PROGRAMS. Click on *Microsoft Excel*

Introduction to Microsoft Excel

Viewing Your Spreadsheet

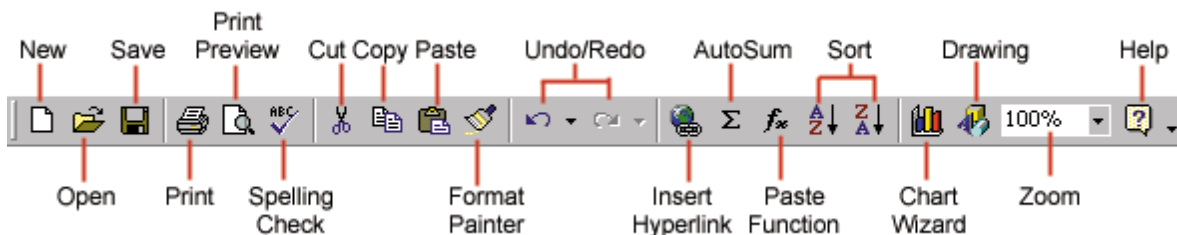
Click **VIEW** on MENU BAR. Highlight **TOOLBARS**. **STANDARD** and **FORMATTING** should be checked.

Click **VIEW** again from the top menu bar. **FORMULA BAR** should be checked.



The Standard Toolbar

This toolbar is located just below the menu bar at the top of the screen and allows you to quickly access basic Excel commands.



New - Select **File**, then **New** from the menu bar

Open - Click **File**, then **Open** from the menu bar

Save - The first time you save a workbook, select **File**, then **Save As** and name the file. After the file is named click **File**, then **Save**

Print - Click the Print button to print the worksheet.

Print Preview - This feature will allow you to preview the worksheet before it prints.

Spell Check - Use the spell checker to correct spelling errors on the worksheet.

Cut, Copy, Paste

Introduction to Microsoft Excel

Moving Cells

To cut cell contents that will be moved to another cell select **Edit**, then **Cut** from the menu bar or click the **Cut** button on the standard toolbar.

Copying Cells

To copy the cell contents, select **Edit**, then **Copy** from the menu bar or click the **Copy** button on the standard toolbar.

Pasting Cut and Copied Cells

Highlight the cell you want to paste the cut or copied content into and select **Edit**, then **Paste** from the menu bar or click the **Paste** button on the standard toolbar.


Drag and Drop

If you are moving the cell contents only a short distance, the drag-and-drop method may be easier. Simply drag the highlighted border of the selected cell to the destination cell with the mouse.


Undo and Redo - Click the backward **Undo** arrow to cancel the last action you performed, whether it be entering data into a cell, formatting a cell, entering a function, etc. Click the forward **Redo** arrow to cancel the undo action.

Insert Hyperlink - To insert a hyperlink to a web site on the Internet, type the text into a cell you want to be the link that can be clicked with the mouse. Then, click the Insert Hyperlink button and enter the web address you want the text to link to and click **OK**.

Autosum, Function Wizard, and Sorting

Use the Autosum  function to add the contents of a cluster of adjacent cells.

Function Wizard  - Excel has many built-in functions.

Basic Sorts  - Use with caution. To execute a basic descending or ascending sort based on one column, highlight the cells that will be sorted and click the Sort Ascending (A-Z) button or Sort Descending (Z-A) button on the standard toolbar.

Zoom - To change the size that the worksheet appears on the screen, choose a different percentage from the Zoom menu.

Moving Through Cells

Use the mouse to select a cell you want to begin adding data to and use the keyboard strokes listed in the table below to move through the cells of a worksheet.

Movement	Key stroke
One cell up	up arrow key
One cell down	down arrow key or ENTER
One cell left	left arrow key
One cell right	right arrow key or TAB
Top of the worksheet (cell A1)	CTRL+HOME

Introduction to Microsoft Excel

End of the worksheet (last cell containing data)	CTRL+END
End of the row	CTRL+right arrow key
End of the column	CTRL+down arrow key
Any cell	File Go To menu bar command

Going For Help



Press the Office Assistant (question mark on standard menu bar)

Type in your question. Click search. Click the topic you are interested in. Chose close button when you are done reading.

Making a Cell Entry

Enter A Text Label - Click the cell you want to type. Type in the label. Move the cursor to another cell to ENTER the data.

Enter A Value - Click the cell where you want to enter the value. Type it in. Move the cursor to another cell to enter the value.

Undo or Redo An Action



Click the UNDO button or REDO button. (on Standard Toolbar.) Each also has a drop down menu to UNDO or REDO repeated actions.

Editing Cell Contents

Click the cell you want to edit. Editing can be done in two ways: In the cell or in the formula bar.

To edit in the formula bar: click in the formula bar and make your changes.

To edit in the cell - PRESS F2 key to enter the edit mode. The word edit will appear in the bottom left hand corner of the screen. You can now edit the cell directly.

Resizing Rows and Columns

There are two ways to resize rows and columns.

Resize a row by dragging the line below the label of the row you would like to resize. **Resize a column** in a similar manner by dragging the line to the right of the label corresponding to the column you want to resize.

If you want to adjust several at one time, highlight the rows or columns, then adjust with the mouse pointer. **or**

Click the row or column label and select **Format**, then **Row|Height** or **Format**, then **Column|Width** from the menu bar to enter a numerical value for the height of the row or width of the column.

Introduction to Microsoft Excel

Deleting A Row or Column

Click the column indicator or row indicator button (the letter or number at the top of the column or side of the row). Click EDIT on menu bar. Click DELETE.

Adding Worksheets, Rows, and Columns

- **Worksheets** - Add a worksheet to a workbook by selecting **Insert**, then select **Worksheet** from the menu bar.
- **Row** - To add a row to a worksheet, select **Insert**, then select **Rows** from the menu bar, or highlight the row by clicking on the row label, right-click with the mouse, and choose **Insert**.
- **Column** - Add a column by selecting **Insert**, then select **Columns** from the menu bar, or highlight the column by click on the column label, right-click with the mouse, and choose **Insert**.

Introduction to Microsoft Excel

Formatting

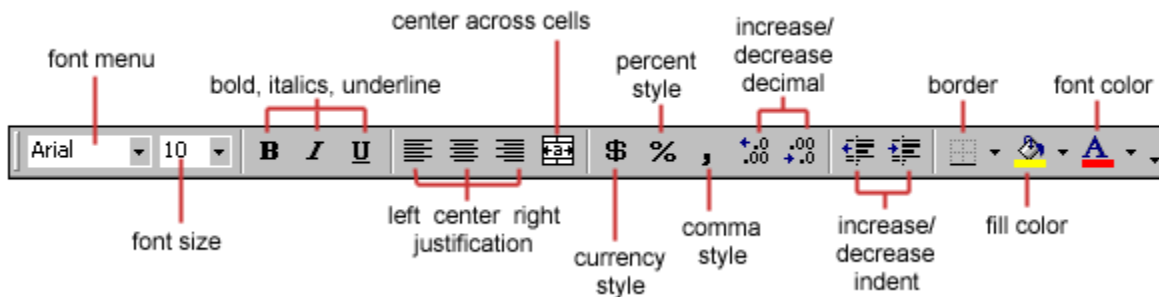
Selecting Cells

Before a cell can be modified or formatted, it must first be selected (highlighted). Refer to the table below for selecting groups of cells.

Cells to select	Mouse action
One cell	click once in the cell
Entire row	click the row label
Entire column	click the column label
Entire worksheet	click the whole sheet button
Cluster of cells	drag mouse over the cells or hold down the SHIFT key while using the arrow keys

Formatting Toolbar

The contents of a highlighted cell can be formatted in many ways. Font and cell attributes can be added from shortcut buttons on the formatting bar. If this toolbar is not already visible on the screen, select **View**, then **Toolbars** and **Formatting** from the menu bar.



Changing Text

Select the cell or range of cells you want to format. Click the B (Bold), U (underline), I (Italics), font, font size on the formatting toolbar.

Changing Number Styles

Select the cell or range of cells you want to format. Click the currency style, percent style, comma, decimal increase, and decimal decrease button on the formatting toolbar.

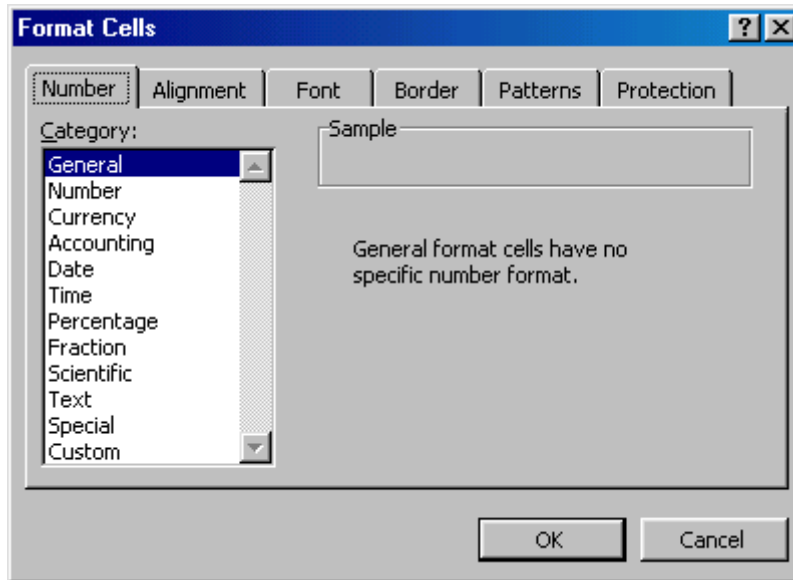
Changing Alignment

Select the cell or range of cells you want to format. Click the alignment buttons on the formatting toolbar.

Format Cells Dialog Box

For a complete list of formatting options, right-click on the highlighted cells and choose **Format Cells** from the shortcut menu or select **Format**, then **Cells** from the menu bar.

Introduction to Microsoft Excel



- **Number tab** - The data type can be selected from the options on this tab. Select **General** if the cell contains text and number, or another numerical category if the cell is a number that will be included in functions or formulas.
- **Alignment tab** - These options allow you to change the position and alignment of the data with the cell.
- **Font tab** - All of the font attributes are displayed in this tab including font face, size, style, and effects.
- **Border and Pattern tabs** - These tabs allow you to add borders, shading, and background colors to a cell.

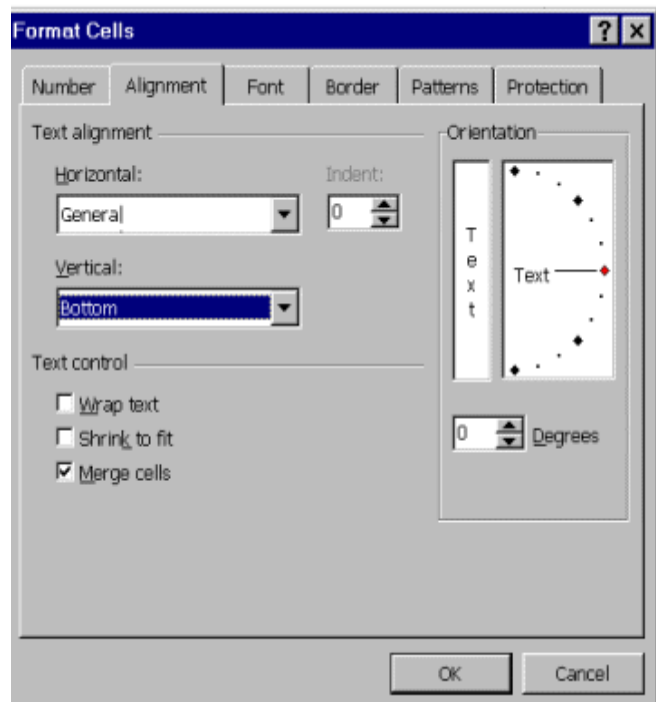
Rotating Text Labels

Rotating the titles allows you to condense the title while keeping column headings readable. Rotating text on a worksheet is useful when you are recording grades and want to clearly label assignments. This feature allows you to format any cell on your worksheet. If you try to rotate merged cells, you may find that only the first letter will display.

Note Rotate column heads +90 degrees to read the text from bottom to top; rotate the heads . 90 degrees to read the text from top to bottom.

Select the text to format

On the **Format** menu, click **Cells**.



Introduction to Microsoft Excel

On the **Alignment** tab, under **Orientation**, click and drag the **Red Diamond** to the vertical position. Click **OK**.

Row Height

Row height is determined by the point size of the typeface used. However, you may increase or decrease the row height, as desired by selecting **FORMAT, ROW HEIGHT**. Default is set to 12.75.

Justifying Data

Select cell or range of cells to justify. Click one of the four alignment buttons on the Formatting toolbar.

Adding a Border

Select the cell or range of cells where you want to apply borders and/or shading. Click **FORMAT, CELLS**. Click the **BORDER** tab and select the line type from the Style List. Click whether you want the border on the outside and also the cell lines inside the range of cells. Color: gives a color to the border.

Adding Shading

This option adds a background color to the cell selected or range of cells: Click **FORMAT, CELLS**. Click the **PATTERNS** Tab. Select the desired color or shading.

Spell Check

Select **Tools** on menu bar, then **spelling**

Freezing part of the spreadsheet for easier viewing

Click any cell in the row you want to freeze, or in the column to the **RIGHT** of the column you want to freeze. Click the **WINDOW** menu. Click **FREEZE PANES**

When you freeze a pane horizontally, all the rows above the active cell also freeze. When you freeze a pane vertically, all the columns to the left of the active cell freeze.

When you freeze a pane, it has **NO EFFECT** on the printed worksheet.

Unfreezing the worksheet

Click **Window menu**. Click **Unfreeze Panes**.

Hiding a Column or Row

Not all data in a worksheet should be available to everyone. You can hide sensitive information without having to permanently delete it by hiding selected columns or rows.

Click the column indicator button of the column you want to hide. Click The **Format** menu, select **Column**, then click **Hide**.

Hiding a row works the same way as does hiding multiple rows or columns.

Introduction to Microsoft Excel

NOTE: Hiding columns or rows does not affect the formulas within a worksheet; all data within hidden columns and rows are still referenced by formulas....they just aren't visible. Hidden columns and rows DO NOT appear in a printout.

Unhiding a Column or Row

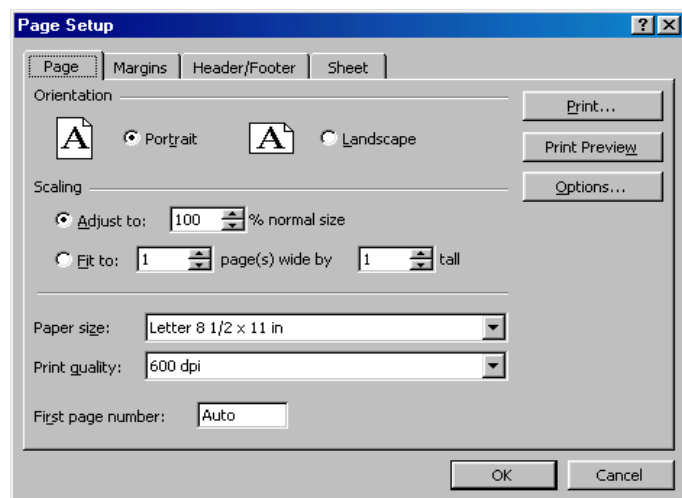
Highlight where you want the column or row to reappear. You may need to select several adjacent columns or rows. Click The **Format** menu, select **Column**, then click **Unhide**.

Page Setup

Select **File**, and then select **Page Setup** from the menu bar to format the page, set margins, and add headers and footers.

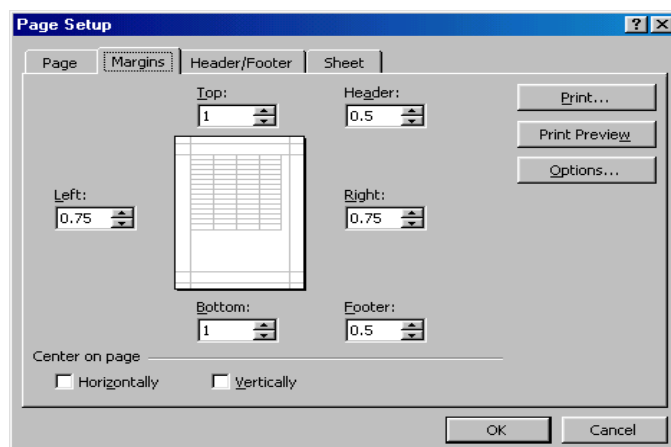
Page TAB

Select the **Orientation** under the **Page** tab in the Page Setup window to make the page Landscape or Portrait. The size of the worksheet on the page can also be formatting under **Scaling**. To force a worksheet to print only one page wide so all the columns appear on the same page, select **Fit to 1 page(s) wide**.



Margins TAB

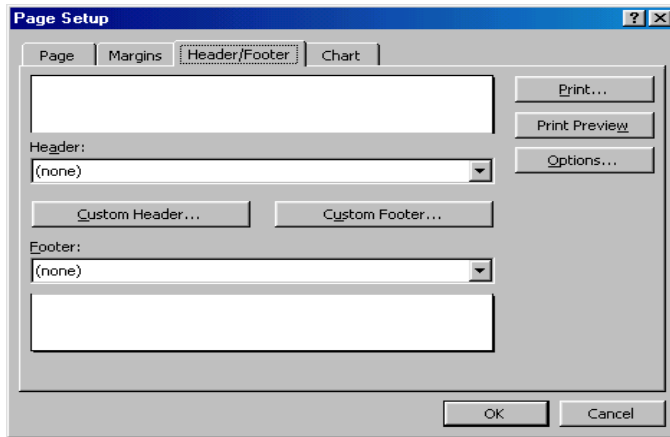
Change the top, bottom, left, and right margins under the **Margins** tab. Enter values in the header and footer fields to indicate how far from the edge of the page this text should appear. **Center on Page**....if checked it automatically centers data relative to right and left margins or top and bottom margins or both if checked.



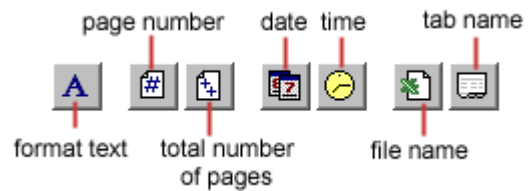
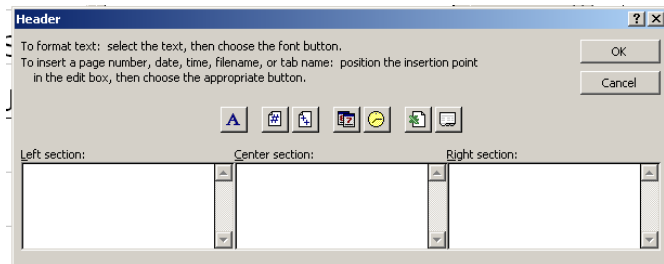
Introduction to Microsoft Excel

Header/Footer

Add preset headers and footers to the page by clicking the drop-down menus under the Header/Footer tab.



To modify a preset header or footer, or to make your own, click the **Custom Header** and **Custom Footer** buttons. A new window will open allowing you to enter text in the left, center, or right on the page.



Format Text - Click this button after highlighting the text to change the font, size, and style.

Page Number - Insert the page number of each page.

Total Number of Pages - Use this feature along with the page number to create strings such as "page 1 of 15".

Date - Add the current date.

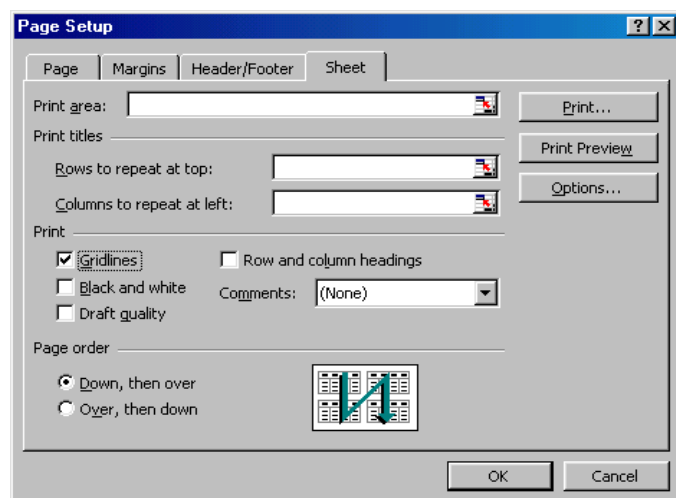
Time - Add the current time.

File Name - Add the name of the workbook file.

Tab Name - Add the name of the worksheet's tab.

Sheet Tab

Check **Gridlines** if you want the gridlines dividing the cells to be printed on the page. If the worksheet is several pages long and only the first page includes titles for the columns, select **Rows to repeat at top** to choose a title row that will be printed at the top of each page.



Introduction to Microsoft Excel

Print Preview

Select **File**, then **Print Preview** from the menu bar to view how the worksheet will print. Click the **Next** and **Previous** buttons at the top of the window to display the pages and click the **Zoom** button to view the pages closer. Make page layout modifications needed by clicking the **Page Setup** button. Click **Close** to return to the worksheet or **Print** to continue printing.

Print

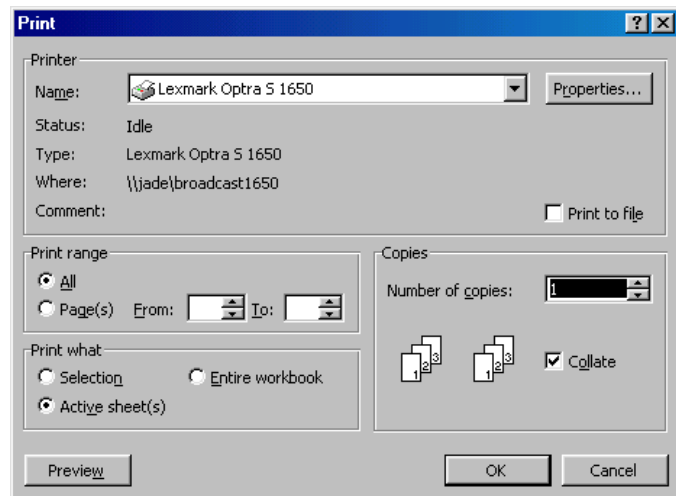
To print the worksheet, select **File**, then **Print** from the menu bar.

Print Range - Select either all pages or a range of pages to print.

Print What - Select selection of cells highlighted on the worksheet, the active worksheet, or all the worksheets in the entire workbook.

Copies - Choose the number of copies that should be printed. Check the **Collate** box if the pages should remain in order.

Click **OK** to print.



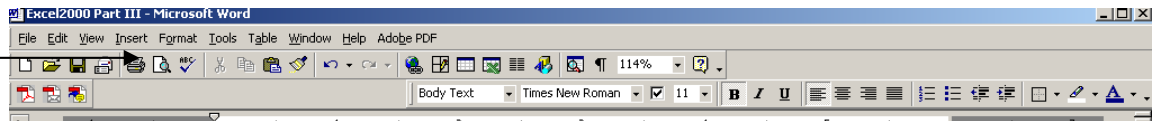
Text Control

If text does not fit into a cell, it spills over into the next cell if that cell is empty. If that cell has data in it, then the text is truncated or cut off. You can format text to automatically wrap to multiple lines so you will not have to widen the column.

Wrap text
Shrink to Fit
Merge Cells

Wraps text to multiple lines within a cell.
Reduces character size to fit within a cell.
Combines selected cells into a single cell.

Adjusting the Margins



Select the Print Preview button from the Standard Toolbar.

Select Setup, and click on Margins. You can then drag the margins and cell columns to adjust their size.

Introduction to Microsoft Excel

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Home prices". The menu bar includes "Next", "Previous", "Zoom", "Print...", "Setup...", "Margins", "Page Break Preview", "Close", and "Help". The spreadsheet contains a table with the following data:

ADDRESS	TOWN	AVAIL	TYPE	ROOMS
125 Kelly Boulevard	Springville	1/1/2008	Townhouse	7
16 Beechly Circle	Arrockar	4/15/2008	Condo	8
236 Ely Street	New Doo	4/1/2008	Condo	6
29 Club Road	Stase Hill	3/1/2008	Condo	8
321 Eaglewood Drive	Toba	3/1/2008	Townhouse	9
345 Jacques Avenue	Toba	1/1/2007	Condo	7
45 Milton Road	Arrockar	12/1/2007	Condo	10
45 Point Road	Stase Hill	4/1/2008	Split	13
5 Flag Terrace	New Doo	2/1/2008	Townhouse	6
607 Miles Street	Springville	2/1/2009	Townhouse	7
621 Elm Road	Arrockar	4/1/2008	Row	8
624 Cline Road	Stase Hill	4/30/2008	Row	8
670 Clark Loop	Stase Hill	12/1/2007	Split	10
71 Regis Avenue	Toba	3/15/2008	Row	7
805 Hardie Road	New Doo	3/15/2008	Split	7
823 Barrow Road	Springville	3/1/2008	Split	7
87 Anthony Street	Springville	1/1/2008	Townhouse	7
89 Abern Lane	New Doo	2/2/2008	Row	7
89 Ely Street	Arrockar	3/15/2008	Condo	11

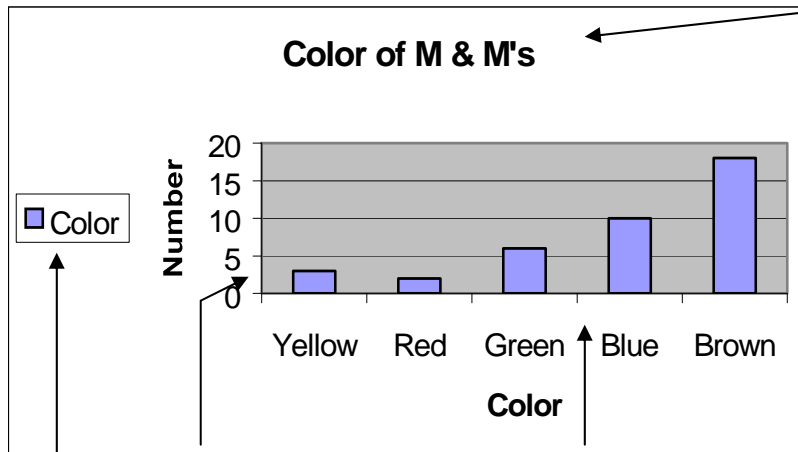
Page 1

Introduction to Microsoft Excel

Charting Data

A **chart**, sometimes called a *graph*, is a visual representation of selected data in your worksheet.

Parts of a Chart



Title – identifies the purpose of the chart

Data series – the range of related data in a chart, such as bars, columns or pie slices

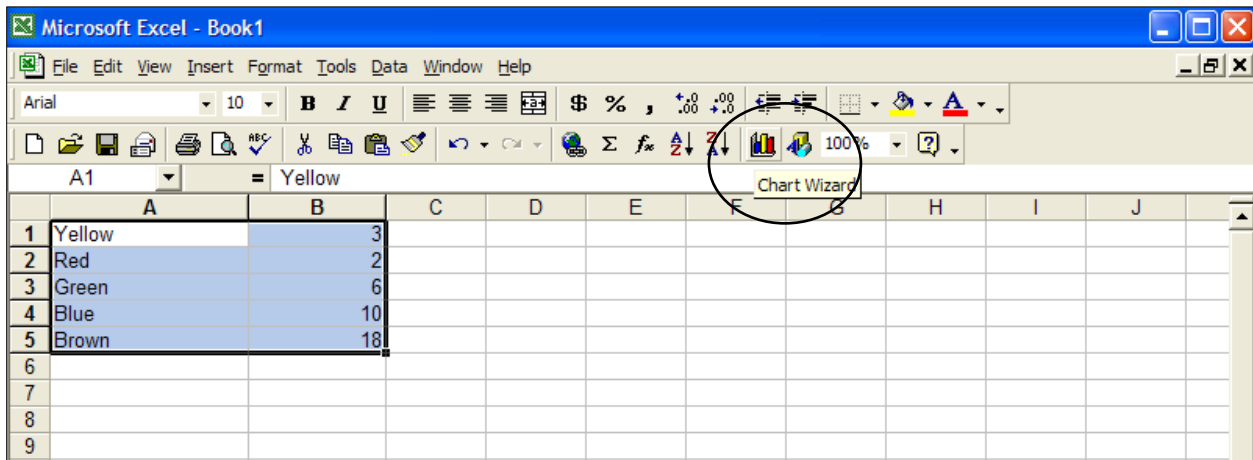
Gridlines – vertical and horizontal guidelines

Y-Axis – The vertical axis **X-Axis** – the horizontal axis

Legend – the key that explains the colors, patterns or symbols in a chart.

Creating a Chart Using the Chart Wizard

Select the data range you want to chart. Make sure you include all the data you want to graph and the row and column labels.

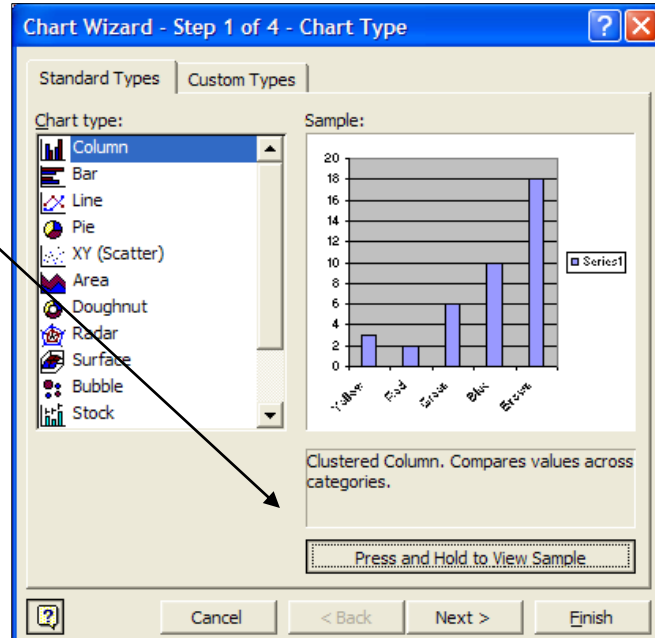


Click the CHART WIZARD button on the menu bar.

Introduction to Microsoft Excel

Select the chart type. Select the chart sub-type.

To view a sample, click the PRESS AND HOLD to view a sample. Click NEXT.



Click the SERIES TAB to label the series. The series is the legend. Click NEXT

Titles: To Identify the data in the chart, type in the titles in the appropriate places.

Gridlines: Can be modified to smaller or larger graduations.

Legend: Placement of legend

Data labels: adds values to data in the form of numbers, or percents

Click NEXT

Select the option you want to place the chart

As a NEW SHEET- this option makes your chart a full sheet

As Object in: Places the chart on the existing spreadsheet; this option is called an embedded object

Click FINISH.

Printing your chart

Select File, then PRINT.

Choose the printer

Choose the print range

ALL or Pages From: ___ To: ___

Introduction to Microsoft Excel

Choose number of copies

Decide how much of the worksheet you want to print

What SELECTION

ACTIVE SHEET – this will print the active sheet only

WHOLE WORKSHEET – this will print all sheets in the worksheet

Editing a Chart

Editing a chart means changing the look and features of the chart. **Editing a chart has no effect on the data used to create it.** If you change your worksheet data, Excel automatically updates your chart.

To edit a chart, you must first select it. Handles display around the window's perimeter and the chart toolbar displays.

Select the chart to edit.

Position the mouse pointer over the chart object, and then click to select it.

Moving an Embedded Chart

Select the chart you want to move.

Position the mouse pointer over a blank area of the chart, then click and drag the pointer to move the outline of the chart to a new location.

Release the mouse button.

Resizing an Embedded Chart

Select the chart you want to resize.

Position the mouse pointer over one of the handles.

Drag the handle to the size you want the chart to be.

Release the mouse button.

Changing a Data Series color or pattern

Click any data point in a data series to select it.

Double click a data point in the selected data series.

If necessary, click the Patterns tab.

Select a color from the area palette.

If you want to add effects, such as textures, patterns, gradients or pictures, click Fill Effects.

Adding or Changing a Title

Select the chart to which you want to add a title.

Use the drop down box to select Chart title.

Type in the text you want for the title.



Introduction to Microsoft Excel

Adding a Text Annotation

Select a chart to which you want to add a text annotation.

Type the text for the annotation.

When you're finished, press Enter and the text annotation appears in a text box within the plot area. Then position the mouse pointer over the text box until the pointer changes shape.

Drag the selected text box to a new location.

Editing a Text Box

Select the text box.

Select **Format** on menu bar.

Select **Selected Object**. You can now change alignment, font color, centering, etc.

Changing a Font and Its Attributes

Select the chart that contains the text you want to change.

Double click the object that contains the text. A **Format** dialogue box opens.

Click the Font tab and choose the font style.

Click OK.

Introduction to Microsoft Excel

Formulas

Adding a Formula or a Built-in Function

The distinguishing feature of a spreadsheet program such as Excel is that it allows you to create mathematical formulas and execute functions. Otherwise, it is not much more than a large table for displaying text.

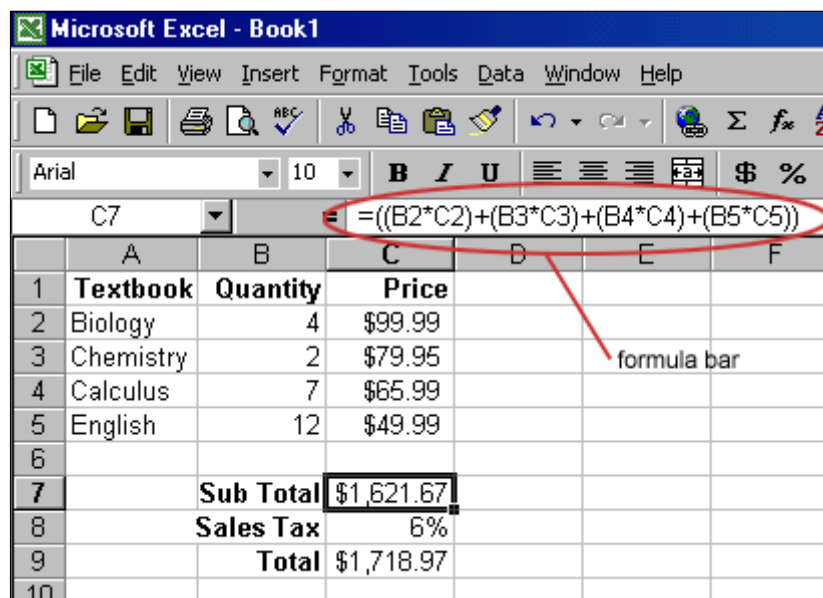
Formulas are entered in the worksheet cell and must begin with an equal sign "=". The formula then includes the addresses of the cells whose values will be manipulated with appropriate operands placed in between. After the formula is typed into the cell, the calculation executes immediately and the formula itself is visible in the formula bar.

Once data is entered into worksheet cells, you will want to enter formulas in other cells to make calculations. The results are always up-to-date no matter how often you change the data because *Excel* automatically recalculates the formulas.

Cell references with formulas generally change when that formula is copied to a new location.

Sometimes you will want the reference to remain the same. Excel gives you the option of controlling how cell references are treated when they are copied.

Excel includes built-in formulas, called **functions**.



The screenshot shows the Microsoft Excel interface. The formula bar at the top displays the formula $=((B2*C2)+(B3*C3)+(B4*C4)+(B5*C5))$. Below the formula bar is a table with the following data:

	A	B	C	D	E	F
1	Textbook	Quantity	Price			
2	Biology	4	\$99.99			
3	Chemistry	2	\$79.95			
4	Calculus	7	\$65.99			
5	English	12	\$49.99			
6						
7		Sub Total	\$1,621.67			
8		Sales Tax	6%			
9		Total	\$1,718.97			
10						

Entering a Formula

Click a cell where you want to enter a formula.

Type and = (an equal sign). If you DO NOT type an = sign, *Excel* will display the information you type, it will not calculate it.

Enter the first argument. An argument can be a number or a cell reference.

Enter an arithmetic operator.

Introduction to Microsoft Excel

Enter the next argument.
Press ENTER to accept the formula.

- ❖ **TIP** Click a cell to insert its cell reference in a formula rather than typing its address to avoid careless typing mistakes.

Arithmetic Operations		
Symbol	Operation	Example
+	Addition	=E3+F3
-	Subtraction	=E3-F3
*	Multiplication	=E3*F3
/	Division	=E3/F3

It is important to consider the order of operations when preparing formulas. Operations enclosed in parentheses have the highest priority and are executed first; exponential calculations are executed second. Multiplication and division have the next priority and are completed before any addition and subtraction. Order of operations can be remembered by the phrase, **Please Excuse My Dear Aunt Sally** or Parentheses, Exponents, Multiplication, Division, Addition and Subtraction.

All operations are executed from left to right in the order of appearance.

Editing a Formula Using The Formula Bar

Select the cell that contains the formula you want to edit.
Click on the formula bar and edit the formula.
Press ENTER when complete.

Copying a Formula using the Handle bar

Select the cell that contains the formula you want to copy.
Point to the lower right corner of the selected cell until the pointer changes to the black plus sign.
Drag the mouse down until the adjacent cells where you want the formula pasted are selected, and then release the mouse button.

Relative Referencing

When formulas are copied from one cell to another, the cell references change relative to their new location. This is called relative reference.

Absolute Referencing

In some cases, a value in a formula must remain constant when copied to other locations. This is called an absolute reference. To identify a cell as an absolute value, a dollar sign (\$) must precede the column and row references for that cell. For example, in the formula =D7/\$D\$15, D15 is an absolute reference. When this formula is copied, D15 will remain constant in all formulas.

Introduction to Microsoft Excel

Linking Worksheets

You may want to use the value from a cell in another worksheet within the same workbook in a formula. For example, the value of cell A1 in the current worksheet and cell A2 in the second worksheet can be added using the format "sheetname!celladdress". The formula for this example would be "=A1+Sheet2!A2" where the value of cell A1 in the current worksheet is added to the value of cell A2 in the worksheet named "Sheet2".

Built-in Functions

A **function** is a built-in formula that automatically performs a special calculation. For example, SUM can be used with a range of cells to add all the values in the specified range.

SUM	=SUM(A4:A6)		Adds all values in a range of cells
AVERAGE	=AVERAGE(A4:A6)		Averages values in range
COUNT	=COUNT(A4:A6)		Counts all non-blank cells in a range; counts cells with values as well as labels
MAX	=MAX(A4:A6)	I	Indicates the highest value in the range
MIN	=MIN(A4:A6)		Indicates the lowest value in the range
SQRT	=SQRT(D10)		Finds the square root of the value in D10
Today	=TODAY()		Returns the current date (leave the parentheses empty)

Autosum

Click the cell where you want a sum. Click the AutoSum icon on the Standard Toolbar.

Auto sum inserts a formula for a RANGE of cells. The range can be a row or a column. If either has a blank cell, AutoSum will still calculate. If it contains more than one blank cell, then it calculates just the highlighted range

Formula BAR and Formula PALETTE

You can enter or edit a function by using the EDIT FUNCTION BUTTION (=) on the formula bar to access the FORMULA PALETTE. The Formula Palette appears with SUM listed in the name box. Click the down arrow to display a list of functions to the left of the formula bar. You can select the desired function and then enter the arguments using the dialog boxes that appear.

For example, if you select the AVERAGE function, the dialog box will display. The number boxes are for the arguments, data or ranges to be averaged. At the right of each number box is a COLLAPSE DIALOG BOX BUTTON that temporarily collapses the dialog box so you can select the data range for the function. When you finish selecting the range, you can click the button again to redisplay the dialog box.

Introduction to Microsoft Excel

IF Function

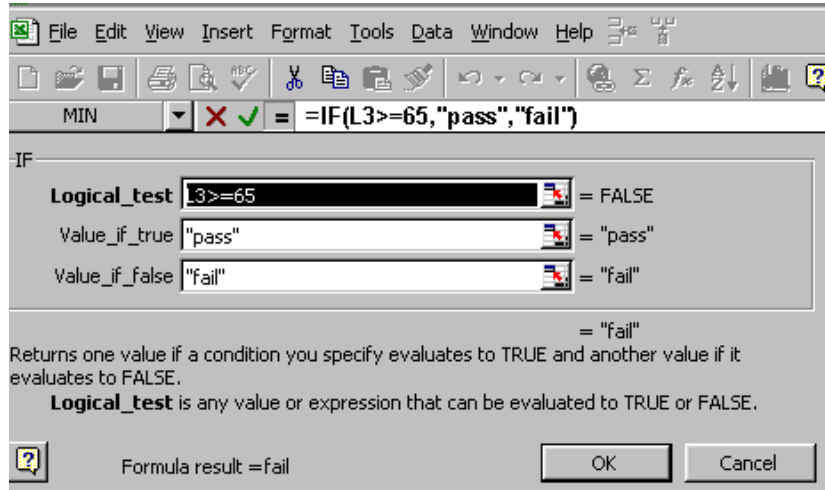
An IF statement may be created to perform one calculation if the condition is true, and perform another or no calculation if the condition is false.

=IF(condition,X,Y)

Example, the passing grade is equal to or greater than 60, then the student passes, otherwise they fail.

=IF(D5>=65,"Pass","Fail")

NOTE: Since Pass and Fail are Labels, they must be enclosed in Quotes.



IF Statements may use the following conditional operators:

=	equals	<=	less than or equal to
>	greater than	>=	greater than or equal to
<	less than	<>	not equal to

Select the IF FUNCTION dialogue box. The first line is used to enter the condition or logical test. The second line is for the value or action if the test is true. The third line is for the value or action if the text is false.

Sorting Data

Sorting data is very tricky in Excel. If you use the sort buttons on the menu bar, it is very easy to corrupt your data. Always sort using the Sort Dialogue box.

Highlight the entire spreadsheet.

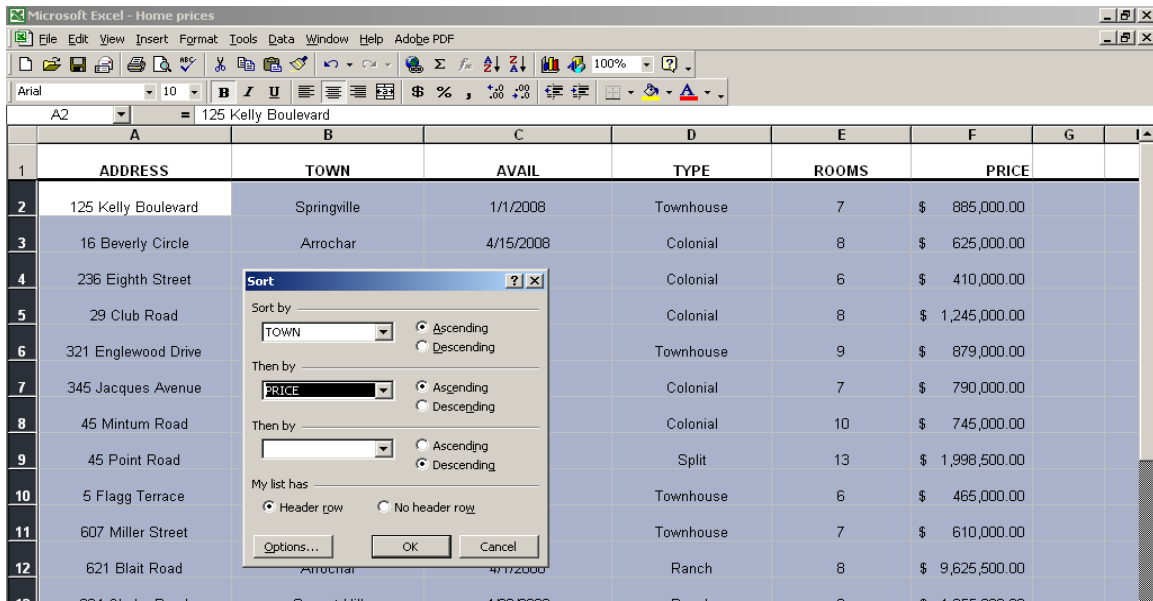
Select **Data** from the menu bar, then **Sort**.

From the **Sort** dialog box, select the first column for sorting from the **Sort By** drop-down menu and choose either ascending or descending.

Select the second column and, if necessary, the third sort column from the **Then By** drop-down menus.

Mark **Header row** if the first row will remain at the top of the worksheet.

Introduction to Microsoft Excel



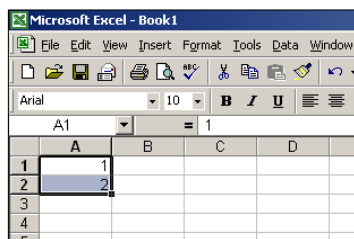
Creating a Series

You can enter sequential **numbers, dates or times** in any increment (e.g. 2, 4, 6,... or January, February, March...).

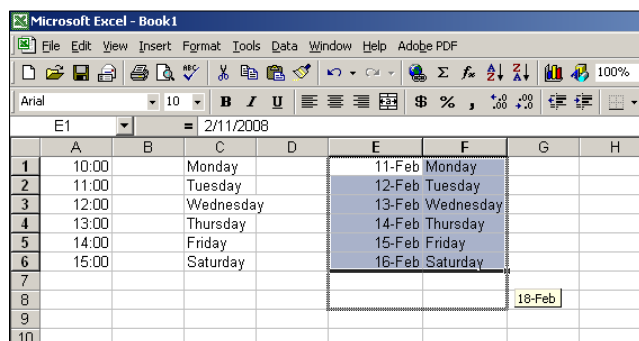
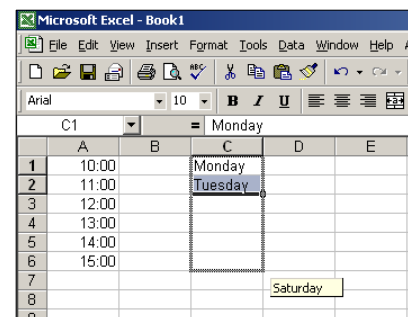
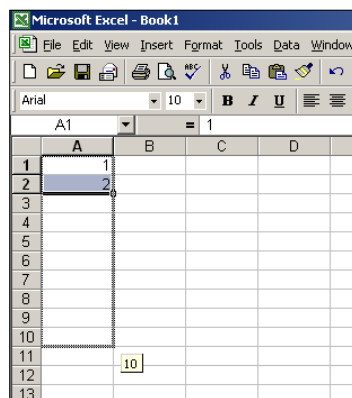
One way to fill a range with a series is to drag the **fill handle** of a selection containing the first and second series values of a range into which you want the series to be entered. *Excel* completes the series based on the values in the selected cells.

Fill Handle

Point to the lower right corner of the selected cell until the pointer changes to the black plus sign. Drag the mouse down to where you want the series or formula pasted, and then release the mouse button.



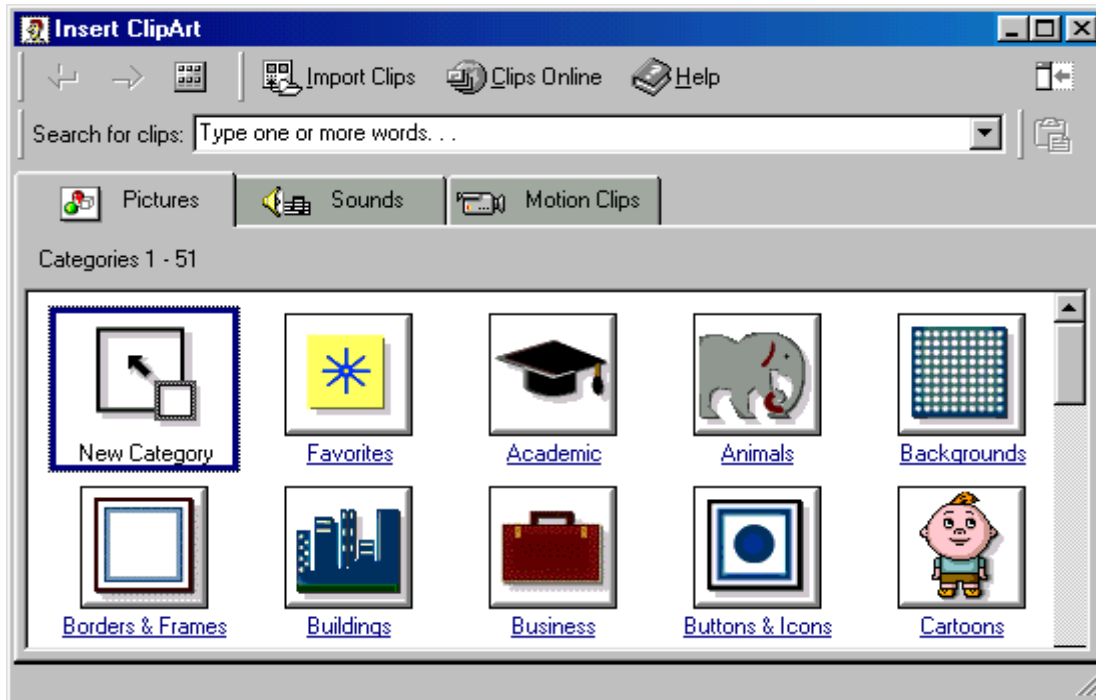
Selecting both columns and rows can also fill multiple columns or rows in a series at one time.



Introduction to Microsoft Excel

Adding Clip Art

Select **Insert**, then **Picture**, and **Clip Art** from the menu bar.



To find an image, click in the white box following **Search for clips**. Delete the words "Type one or more words. . ." and enter keywords describing the image you want to use. **Or** click one of the category icons.

Click once on the image you want to add to the worksheet and the following popup menu will appear:

- **Insert Clip** to add the image to the worksheet.
- Click the **Close** button in the top, right corner of the **Insert ClipArt** window to stop adding clip art to the worksheet.

