

EXCEL 2000 Creating and Editing Tables
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Version

1

CREATING AND EDITING TABLES

Excel 2000



Ministry of Education Headquarters
Lusaka, Zambia

Introduction

This in-house course has been developed to increase your knowledge of popular applications software and to provide you with the skills to accomplish your day-to-day work activities more efficiently. The design of the course is based on the assumption that you have completed the course prerequisites.

This manual has been compiled to support and to enhance the instructor's lecture during class as well as to serve as your personal reference when you return to your office.

Manual Conventions

Throughout this manual reference is made to various components of the software. Command buttons, menus, and menu options appear in boldface type, for example, **OK** and **File**. Keystrokes appear in boldface italic type, for example, ***Ctrl + V*** and ***Enter***. When possible, the words *select* and *choose* have been used in this manual to allow you the option of using either the mouse or keyboard.

For your assistance, ample space along the left margin has been provided to allow room for notes relevant to the topic discussed. We also include notes of importance () , mouse-based shortcuts () , keyboard shortcuts () , cautionary notes () , and work notes () .

Course Objectives

After this course, you will have the skills necessary to:

- ✓ *Understand the elements of Excel 2000 to create and edit tables.*
- ✓ *Open, save, and close workbooks to perform editing and file management tasks.*
- ✓ *Enter and edit labels, values, and formulas to update and maintain workbooks.*
- ✓ *Create, access, and edit range names to move around worksheets, to use in formulas, and to use for printing.*
- ✓ *Copy and move labels, values, and formulas to reduce data entry time and to improve accuracy and reliability.*
- ✓ *Select single or multiple ranges to move, copy, format, or print data and to create formulas within the spreadsheet.*
- ✓ *Create formulas and functions in a worksheet to perform calculations on numbers.*
- ✓ *Format worksheets to meet MOE-standard settings for tables.*
- ✓ *Print copies of tables for presentation and distribution.*
- ✓ *Manipulate worksheets for more efficient organization.*

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Creating a New Table in Excel

In this lesson, you will learn the skills necessary to:

- ✓ *Start Excel to access a new workbook file.*
- ✓ *Open a new workbook file to create a table.*
- ✓ *Identify different types of data.*
- ✓ *Select individual cells to enter and edit data.*
- ✓ *Move around and between worksheets to navigate to different locations.*
- ✓ *Use the Go To option and Name box to navigate to different locations on sheets.*

Understanding a Common Approach to Creating a New Table

Creating a new table in Excel 2000 is easy, provided you go about it in a systematic fashion. The general guidelines to follow when creating Excel tables for the first time are listed below.

Process of Creating a New Table for the First Time

- Step 1. Plan how the data is to be organized in columns and rows.
- Step 2. Create a new workbook.
- Step 3. Enter the table title, units of measure, columns headings, row headings, and data.
- Step 4. Save the workbook file.
- Step 5. Enter your formulas.
- Step 6. Resave the workbook file.
- Step 7. Format cell content to Times New Roman 10 pt.
- Step 8. Format the numeric data to meet standards.
- Step 9. Manipulate columns widths and row heights, if necessary.
- Step 10. Enter any sources, notes, or footnotes.
- Step 11. Format the table title to Times New Roman 12 pt. and center it across the width of the table.
- Step 12. Center the units of measure across the width of the table.
- Step 13. Center spanned column headings over the relevant data columns if necessary.
- Step 14. Add the necessary borderlines.

STEPS CONTINUE ON NEXT
PAGE



- Step 15. Resave the workbook.
- Step 16. Select the print area.
- Step 17. Print Preview the worksheet.
- Step 18. Adjust the margins and page orientation if necessary.
- Step 19. Turn off gridlines.
- Step 20. Print the worksheet.

Starting Excel 2000

Excel 2000 can be launched from the **Start | Programs** menu on the Taskbar or from the application icon on the **Desktop**.

How to Start Excel from the Start Menu

- Step 1. From the **Taskbar**, choose the **Start** button.
- Step 2. From the **Start** menu, choose **Programs**.
- Step 3. From the **Programs** submenu, choose **Microsoft Excel**.

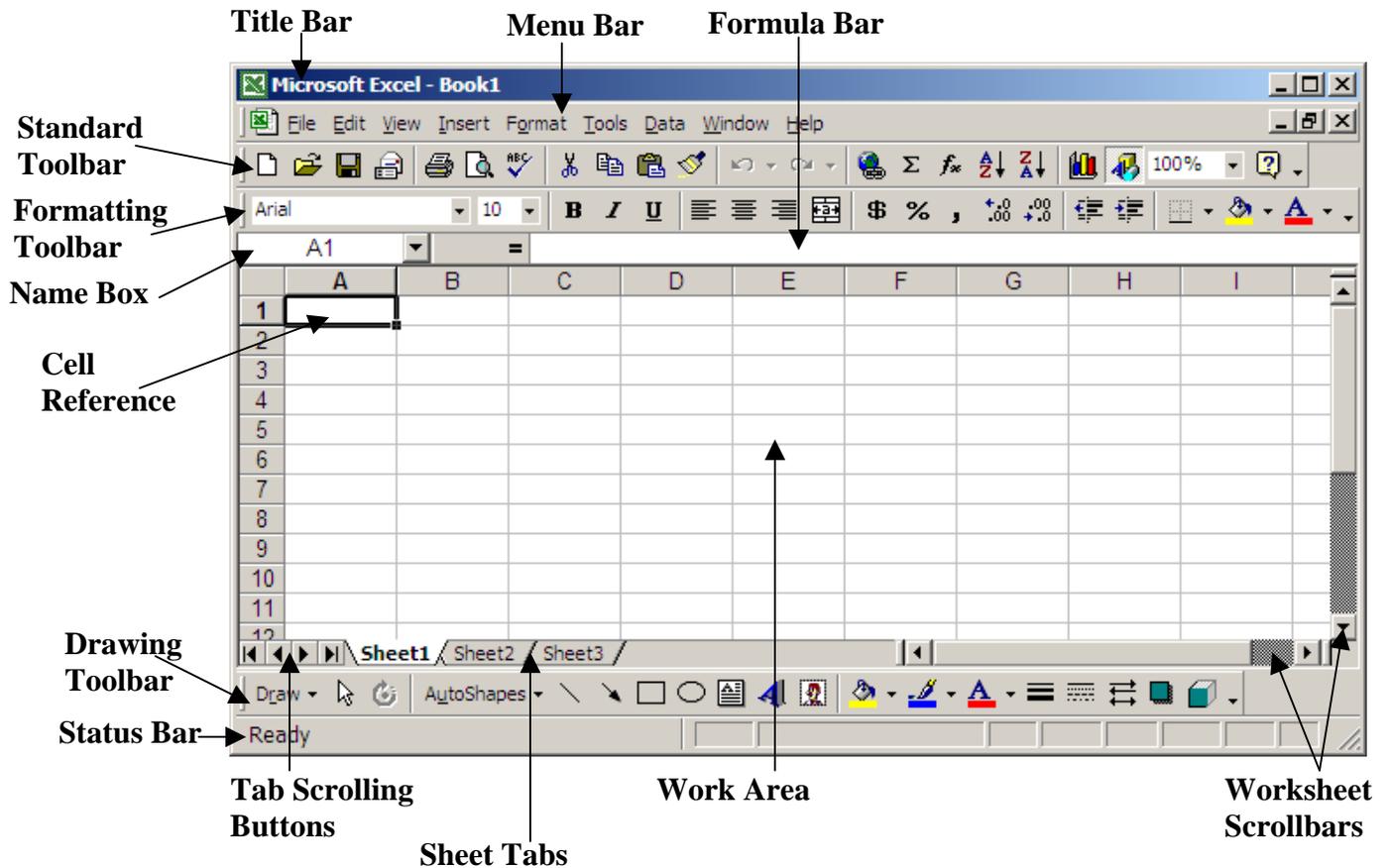
How to Start Excel from the Desktop

- Step 1. From the **Desktop**, double-click on the **Microsoft Excel** program icon.



Components of the Excel 2000 Interface

The interface in Excel 2000 is similar to other Windows applications such as Word, PowerPoint, and Outlook, and contains menu bars, toolbars, shortcut menus, and status bars. The standard interface used is shown in the following diagram.



The work area contains rows and columns of cells in which to enter data. This grid is called a worksheet.

Components of the Excel Interface

Item	Description
Title Bar	Displays the file and application name.
Menu Bar	Includes standard Windows menu options as well as options specific to Excel. Each menu contains a pull-down list of commands, grouped by function.
Standard Toolbar	Contains buttons to activate various options, generally for standard commands such as opening or printing a worksheet.
Formatting Toolbar	Contains buttons to format the current worksheet.
Name Box	Displays the worksheet address of the active cell. It is also used to name and jump to ranges on the worksheet.
Tab Scrolling Buttons	Used to move between worksheets.
Cell Reference	This is the currently selected cell to enter or edit data.
Sheet Tabs	Identify the active sheet and allow you to select different sheets.
Formula Bar	Provides a way to enter or edit the contents of the active cell.
Work Area	Displays a portion of the current worksheet. The worksheet scroll bars are used to view other regions of the worksheet.

Identifying Excel Toolbars

Excel will display two different toolbars during most worksheet operations: the **Standard** and the **Formatting** toolbars.

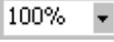
The following tables explain the purpose of the buttons present on each toolbar.

Standard Toolbar		
Icon	Name	Function
	New Workbook	Opens a blank workbook.
	Open	Accesses the Open file dialog box.
	Save	Saves and replaces the existing file.
	e-Mail	Sends the current worksheet as the body of an e-mail message.
	Print	Prints the worksheet.
	Print Preview	Provides a preview of the area to be printed.
	Spelling	Checks the workbook for spelling errors.
	Cut	Cuts the selected item to the clipboard.
	Copy	Copies the selected item to the clipboard.
	Paste	Places the clipboard item where the cursor is in the spreadsheet.
	Format Painter	Copies the formatting attributes from the selected cells or objects.
	Undo	Cancels the last keyboard action.
	Redo	Executes the last canceled keyboard action.
	Insert Hyperlink	Creates hypertext links to internal and external information.
	AutoSum	Automatically adds a highlighted range or adds the cells directly above or to the left of the current cell.
	Paste Function	Accesses the Paste Function dialog box.

TABLE CONTINUES ON
NEXT PAGE



Standard Toolbar

Icon	Name	Function
	Sort Ascending	Sorts the current list in order from lowest value to highest value, using the column that contains the active cell.
	Sort Descending	Sorts the current list in order from highest value to lowest value, using the column that contains the active cell.
	Chart Wizard	Accesses the Chart Wizard dialog box, enabling you to create an embedded chart or modify an existing one.
	Drawing	Displays the Drawing toolbar.
	Zoom Control	Permits you to see more or less detail by changing the scale of the sheet.
	Help	Adds a question mark (?) to the mouse pointer. When you place the new pointer over a command name or screen element and click the mouse button, you get information about that command or screen element.

Formatting Toolbar

Icon	Name	Function
	Font	Lists the available fonts.
	Font Size	Lists the available sizes for the font shown in the Font icon text box.
	Bold	Applies bold formatting to selected characters in cells, text boxes, buttons, or chart text.
	Italic	Applies <i>italic</i> formatting to selected characters in cells, text boxes, buttons, or chart text.
	Underline	Applies <u>underline</u> formatting to selected characters in cells, text boxes, buttons, or chart text.
	Align Left	Aligns the contents of selected cells, text boxes, buttons, or chart text to the left.

TABLE CONTINUES ON
NEXT PAGE



Formatting Toolbar

Icon	Name	Function
	Align Center	Centers the contents of selected cells, text boxes, buttons, or chart text.
	Align Right	Aligns the contents of selected cells, text boxes, buttons, or chart text to the right.
	Merge and Center	Centers the text from one cell horizontally across the selected cells.
	Currency Style	Applies the currently defined Currency style to selected cells.
	Percent Style	Applies the currently defined Percent style to selected cells.
	Comma Style	Applies the currently defined Comma style to selected cells.
	Increase Decimal	Adds one decimal place to the number format each time you click the button.
	Decrease Decimal	Removes one decimal place from the number format each time you click the button.
	Decrease Indent	Inserts indent spaces within cells.
	Increase Indent	Removes indent spaces within cells.
	Borders	Displays a palette of border styles you can use to apply borders to selected cells.
	Fill color	Changes the foreground color of a selected cell or object.
	Font color	Displays a palette of colors you can use to change the font color of selected characters in cells, text boxes, buttons, or chart text.

Creating a New Workbook File

Excel automatically creates a new file, called a workbook, when the program starts. You have the option of working with the new file or opening an existing file. You also can open another new workbook file at any time. Excel assigns a default file name to every new file that is opened; Book1 is the first new workbook opened, while other new workbooks opened during a session are named consecutively as Book2, Book3, etc. The .xls extension that identifies an Excel file is appended automatically. If the file has already been saved, Excel will use the saved file name.

How to Create a New Workbook

Step 1. From the **Standard** toolbar, choose the **New Workbook** button.



or

From the **File** menu, select **New**.

Step 2. From the New dialog box, click on **OK** or press *Enter* (the default template is Workbook).

Identifying Different Types of Data

Excel worksheet cells can contain **labels**, **values**, or **formulas**. Text labels and values are often referred to as **constant values**. For example, the date 10/9/96, the number 210, and the text “Quarterly Earnings” are all constant values. Formulas are mathematical equations, always beginning with an equal sign (=), that calculate values. These calculations will change as the data in the cells identified in the formula change.

Data Type	Features of Data Types
	Features
Constant Values (text labels and values)	<ul style="list-style-type: none"> • Can include letters, numbers, and symbols. • As many as 32,767 text characters can be typed in a cell. • Text labels automatically align on the <i>left</i> side of the cell. • Labels are used to describe the data contained in a row or column. • Numeric values automatically align on the right side of the cell. • Numeric values can contain only the following characters: 1 2 3 4 5 6 7 8 9 0 - + () , / \$ % . E e • To type a negative number, precede the number with a minus sign. • Consists of numbers, arithmetic operators, and cell references used to calculate a new value. Some values may start with a mathematical symbol. • Dates typed in most common ways are recognized by Excel 2000. • Excel converts date entries to a <i>serial number</i>. The serial number represents the number of days from the beginning of the century until the date you typed.

Features of Data Types

Data Type	Features
Formulas	<ul style="list-style-type: none">• A valid date typed into an unformatted cell is aligned as a number to the right. This allows dates to be used in formulas.• A formula begins with an equal sign (=), followed by what the formula calculates. For example, the formula, =5-1, subtracts 1 from 5. The result is then displayed in the cell.• A formula is an equation that analyzes data on a worksheet. Formulas perform operations such as addition, multiplication, and comparison on worksheet values; they can also combine values. Formulas can refer to other cells on the same worksheet, cells on other sheets in the same workbook, or cells on sheets in other workbooks.

Entering Data

When you enter data into a workbook, Excel identifies the data as a text label, value, or formula. If the entry contains only numbers, is a valid date, or begins with an equal sign (=) for a formula, Excel assumes that the entry is a value. In all other cases, the cell entry is considered a text label.

If a text label exceeds the length of the cell, the content spills to the right, left, or both, depending on the alignment setting. If you enter data in a cell adjacent to a cell containing data, Excel truncates the displayed appearance of the text label within the cell. Despite the text label's shortened appearance, the entire text label is stored within the cell.

How to Select a Cell

Step 1. Place the mouse pointer in the middle of the cell and click the **left mouse button**

or

Use the directional **arrow keys** until the appropriate cell is selected.



The mouse pointer should be a large white plus sign when selecting a cell or range; otherwise an Excel function may be selected.

How to Enter Text Labels

Step 1. In the active cell, type the text.

Step 2. To accept the entry, press **Enter**

or

Use an **arrow key** to move to an adjacent cell.



If a text label is wider than the table (as may be the case with a table footnote), you can justify the text so it does not span beyond the table. Refer to page 85 for details.



Clicking the green check mark in the Formula bar, discussed later in this book, will also accept the entry. Pressing **Esc** or clicking the red X will cancel the entry.

How to Enter Values

Step 1. In the active cell, type the value.

Step 2. To accept the entry, press **Enter**

or

Use the **arrow keys** to move to an adjacent cell.



Place an apostrophe (') at the beginning of a cell value or date entry to make the item a label.

How to Enter Dates

Step 1. In the active cell, type the date in the long international format (**mm/dd/yyyy**), for example, 11/25/2001.

Step 3. To accept the entry, press **Enter**

or

Use the **arrow keys** to move to an adjacent cell.



If the cells are not formatted, you may enter the date directly. If the cells have been numerically formatted, you will need to change the number format to the appropriate date format using the **Format Cells** dialog box. This is necessary because Excel applies formatting to cells, not to values.



Excel displays the date in the Formula bar and can use it in calculations.

Editing Cell Content

From time to time, you will need to edit the contents of your workbook. You can alter part of a cell or replace the entire cell contents.

How to Replace Cell Content

- Step 1. Select the cell.
- Step 2. Enter the new data.
- Step 3. To accept the entry, press ***Enter***
- or
- Use the ***arrow keys*** to move to an adjacent cell.

How to Edit Cell Content

- Step 1. Place the mouse pointer over the cell and double-click,
- or
- Select the cell and press ***F2***
- or
- Select the cell and single click in the **Formula Bar**.
- Step 2. Make the necessary changes.
- Step 3. Press ***Enter*** to accept the new entry.



To undo or redo more than one action at a time (up to the last 16), click the ***down arrow*** next to the button and select the actions you want to reverse. Note: It will undo all actions up to the point you have selected.

Deleting or Clearing Cell Content

You may find it necessary to delete or clear the contents of a cell. Deleting cell content removes the value, text, or formula from the cell but does not affect the cell's formatting. Excel's clearing options allow the removal of the formatting associated with a cell but does not remove the value contained within the cell.

How to Delete or Clear Cell Content

- Step 1. Select the cell(s).
- Step 2. Point to the cell, right-click and select **Clear Contents**
- or
- Press the *Delete* key.

How to Clear Cell Content and/or Formatting

- Step 1. Select the cell(s).
- Step 2. From the **Edit** menu, select **Clear**.
- Step 3. From the **Clear** submenu, select one of the following options.

Edit...Clear Options	
Option	Function
All	Deletes the formatting, contents, and comments of the cell(s).
Formats	Deletes only the formatting of the cell(s).
Contents	Deletes only the contents of the cell(s). This is the same as pressing the Delete key.
Comments	Deletes only the comments of the cell(s).

Using Undo and Redo Actions

The **Undo** feature reverses the last command or deletes the last entry you typed. Excel 2000 remembers the last **16** actions. To reapply the canceled action, select the redo button located to the right of the undo button.

The command name in the **Edit** menu changes to **Can't Undo** and the button will gray out if you cannot reverse the action.

The undo feature will *not* cancel a file being saved, closed, opened, printed, or manipulated by the actions in the **Window** menu.

How to Use Undo

Step 1. From the **Standard** toolbar, choose the **Undo** button



or

From the **Edit** menu, select **Undo**.

How to Use Redo

Step 1. From the **Standard** toolbar, choose the **Redo** button



or

From the **Edit** menu, select **Redo**.

Checking Spelling in a Worksheet

You can check spelling on all types of worksheets. If you use words that are not in the main dictionary, such as acronyms or proper names, you can add the words to a custom dictionary. Excel will then question the words only if they are misspelled.

Unless a range of cells or an object is selected when you check spelling, Excel checks the entire active worksheet, including cell values, cell comments, embedded charts, text boxes, buttons, and headers and footers. However, Excel does not check protected worksheets, formulas, or text that results from a formula.

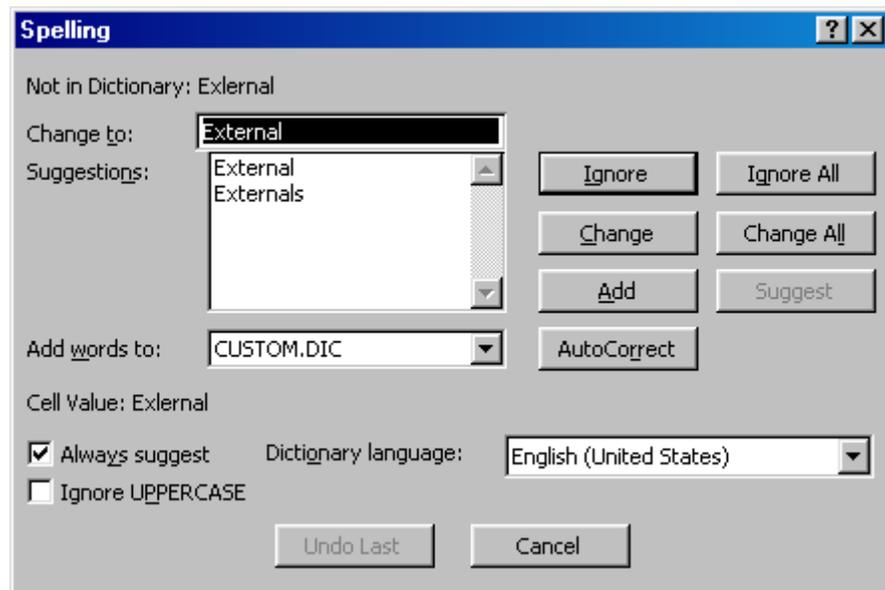
If the formula bar is active when you check spelling, Excel checks only the contents of the formula bar.

How to Spell Check a Worksheet

Step 1. From the **Standard** toolbar, choose the **Spelling** button.



A dialog box similar to the following will appear:



STEPS CONTINUE ON NEXT PAGE



Options in the Spelling Dialog Box

Option	Description
Ignore	Leaves the current instance of the word displayed in Not in Dictionary unchanged on your worksheet.
Ignore All	Leaves all instances of the word displayed in Not in Dictionary unchanged on your worksheet.
Change	Changes the current instance of the word displayed in Not in Dictionary to the word highlighted in the Change to box.
Change All	Changes all instances of the word displayed in Not in Dictionary to the word highlighted in the Change to box.
Add	Adds the word in the Not in Dictionary box to the dictionary selected in the Add Words To box.
Suggest	Displays a list of proposed alternatives for a misspelled word.
AutoCorrect	Adds a word to the AutoCorrect list so that AutoCorrect can correct it automatically as you type.
Always Suggest	Shows suggested spellings for misspelled words.
Ignore Uppercase	Ignores words in uppercase letters.
Dictionary Language	Switches between various language dictionaries.

Step 2. Continue through spell check selecting the appropriate options.

Step 3. Choose **OK** from the dialog box that tells you spell check is completed.

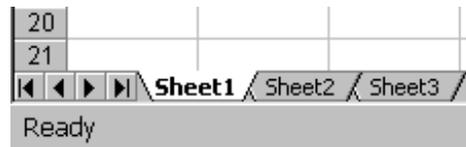


You may receive a dialog box asking if you would like to continue spell check from the beginning of the document; choose Yes or No as appropriate.

Moving Around Worksheets

Workbooks can contain 256 worksheets. Each worksheet contains 256 columns that are designated by a letter combination starting with A and ending with IV. Each worksheet contains 65,536 rows that are numbered consecutively from 1 to 65,536. The intersection of a row and a column is called a cell. Each workbook contains more than 1 billion cells. Each cell has a unique cell address, designated as a combination of the column letter and row number, such as A25, V573, or BD123. Therefore, to work effectively in the spreadsheet environment one must be familiar with how to move around the workbook.

Excel displays **sheet tabs** for each worksheet. Moving between worksheets involves clicking the desired sheet tab and using the sheet tab scroll buttons, shown in the following figure.



How to Move Between Worksheets with the Mouse

Step 1. To move between worksheets with the mouse, use one of the following buttons:

Button	Action
	Moves to the specified worksheet.
	Shows the sheet tab of the first worksheet.
	Shows the sheet tab of the previous worksheet.
	Shows the sheet tab of the next worksheet.
	Shows the sheet tab of last worksheet.



The sheet tab scroll buttons will change the sheet tabs you are viewing, but they will not activate the worksheet. You must click on the sheet tab to activate the worksheet.

How to Move Around the Worksheet Using the Scrollbars

Step 1. Position the cursor over the appropriate direction arrow and click lightly to move column by column or row by row.



Clicking on the background portion of a scrollbar causes the worksheet to scroll one screen width (or height) at a time.

How to Move Around the Worksheet Using the Keyboard

Key	Action
<i>Alt + Page Down</i>	Moves the pointer one screen to the right.
<i>Alt + Page Up</i>	Moves the pointer one screen to the left.
<i>Ctrl + Home</i>	Moves the cell pointer to cell A1 on the active worksheet.
<i>Ctrl + End</i>	Moves the cell pointer to the last cell containing data on the active worksheet.
<i>Down Arrow</i>	Moves the pointer one cell down.
<i>End + Right Arrow, End + Left Arrow, End + Up Arrow, End + Down Arrow</i>	When the cell pointer is in a cell containing data, the cell pointer moves to the last cell containing data in the specified direction. If a keystroke combination is issued when the cell pointer is in an empty cell, the cell pointer moves to the first cell that contains data in the specified direction. If no cells in the specified direction have data, the cell pointer moves to the end of the worksheet.
<i>Home</i>	Moves the pointer to the beginning of the row.
<i>Left Arrow</i>	Moves the pointer one cell to the left.
<i>Page Down</i>	Moves the pointer one screen down.
<i>Page Up</i>	Moves the pointer one screen up.
<i>Right Arrow</i>	Moves the pointer one cell to the right.
<i>Up Arrow</i>	Moves the pointer one cell up.

How to Move Between Worksheets with the Keyboard

Step 1. To move between worksheets, do one of the following:

Keystrokes	Action
<i>Ctrl + Page Down</i>	Moves the cell pointer to the next worksheet.
<i>Ctrl + Page Up</i>	Moves the cell pointer to the previous worksheet.

How to Move Between Worksheets with the Shortcut Menu

Step 1. Move the mouse pointer over the worksheet scroll buttons.

Step 2. Right-click and select the desired sheet from the shortcut menu.

Using Go To

If you know the cell address, range name, or even the approximate address of the cell to which you want to move, the **Go To** dialog box provides a quick way to move around any worksheet or workbook.

To move directly to a cell on another worksheet you enter the sheet name followed by an exclamation point, then the cell address in the **Go To** dialog box, for example, Sheet1!A55. If the sheet name contains a space, you must place single quotation marks around the entire sheet name, followed by an exclamation point, for example, 'Table One'!A20.

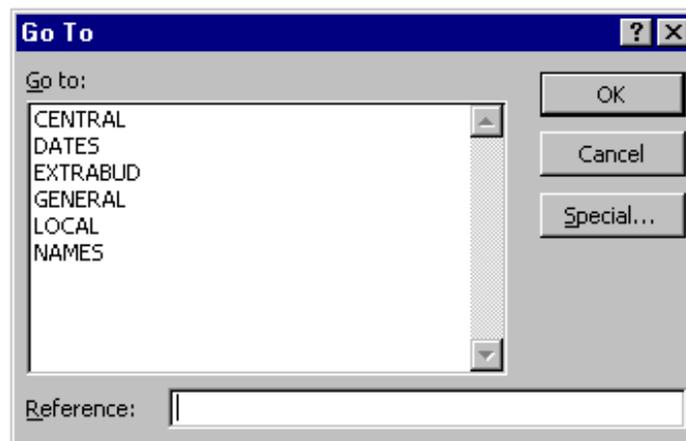
How to Use the Go To Dialog Box

Step 1. From the **Edit** menu, select **Go To**

or

Press **F5**.

A dialog box similar to the following will appear:



Step 2. In the **Reference** text box, type the worksheet and cell address

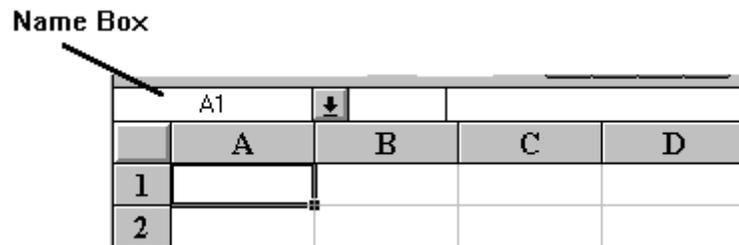
or

In the **Go To** list box, select a range name.

Step 3. Select **OK**.

Using the Name Box

The **Name Box** displays the address or name of the active cell. It is located on the far left of the formula bar. It can be used much like the **Go To** dialog box.



How to Use the Name Box to Move Around the Workbook

- Step 1. With the mouse, click inside the **Name Box**
- or
- Select the drop-down list box adjacent to the **Name Box**.
- Step 2. Type in the cell address or range name and press *Enter*
- or
- From the drop-down list, choose a **range name**.

Excel File Management

In this lesson, you will learn the skills necessary to:

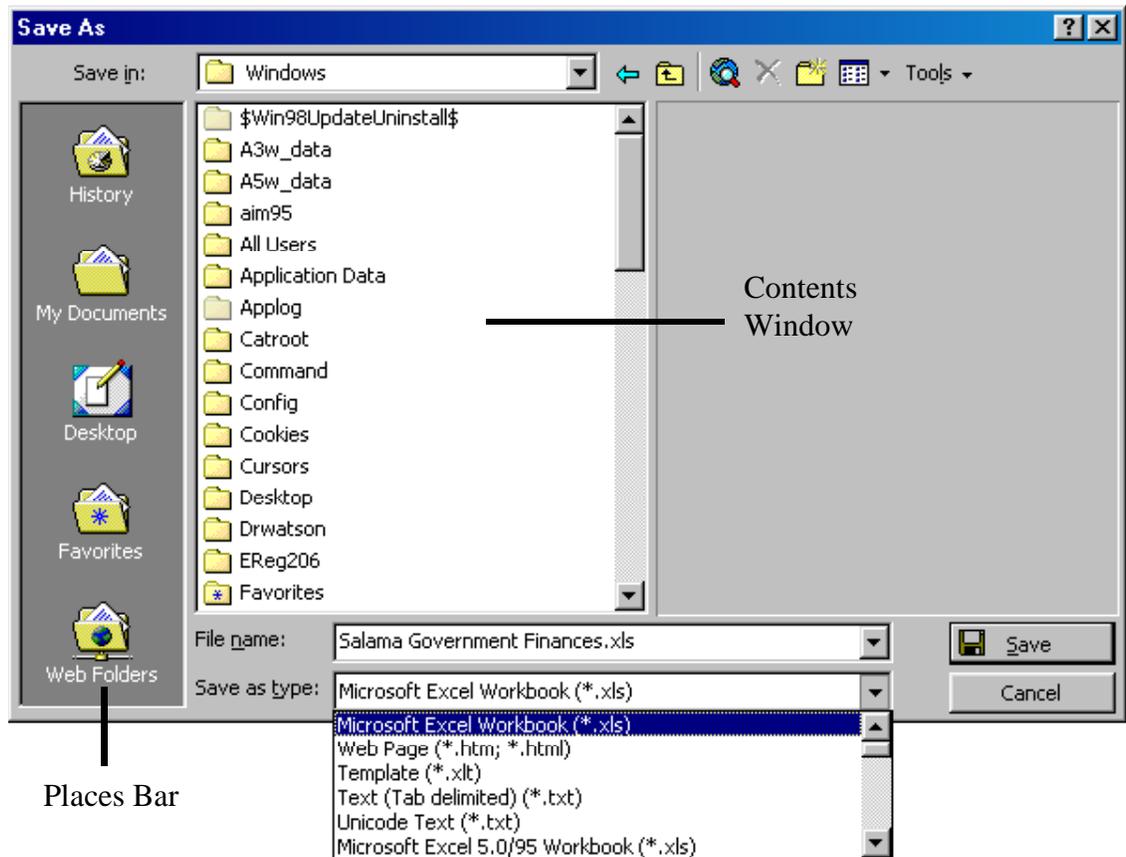
- ✓ *Save a new or existing workbook.*
- ✓ *Save an existing workbook to a different name.*
- ✓ *Close a workbook.*
- ✓ *Open a workbook.*
- ✓ *Switch between multiple workbooks.*
- ✓ *View multiple workbooks.*

Saving Workbooks

There are two ways to save a file: **Save** and **Save As**.

- The **Save** command saves changes under the existing location and file name.
- The **Save As** command allows you to save the changed file under a new name, in a new location, or as a different file type, while keeping the previous copy unchanged under the original file name.

A Save As dialog box similar to the following is shown below:



STEPS CONTINUE ON NEXT
PAGE



Components of the Save As Dialog Box

Component	Description
Save in	Used to select a drive and folder. Choose the drop-down arrow to reveal an alphabetical list of the available drives.
Contents Window	Displays the contents of the drive or folder displayed in the Save in: field. Used to select a folder or file. Double-click on the folder or file to select it.
File name	Type the new file name in the text box or select recently used files from the drop-down list to the right of the field.
Save as type	Displays the current file type. Use the drop-down arrow to display other types of files.
Places Bar	Displays shortcuts to commonly used areas on your computer.



Selecting **History** on the **Places Bar** will list up to the last 50 documents you have worked with.

How to Save an Existing Workbook with the Same Name

Step 1. From the **Standard** toolbar, choose the **Save** button



or

From the **File** menu, select **Save**.

How to Save a New or Existing Workbook Under a New Name

- Step 1. From the **File** menu, select **Save As**
- or
- Press **F12**.
- Step 2. Change the drive and folder, if necessary.
- Step 3. In the **File name** text box, type the name of the file.
- Step 4. From the **Save As Type** drop-down box, select the appropriate file type (default is an Excel 2000 file).
- Step 5. Select **Save**.



If no version is indicated in the **Save As Type** box, the workbook is saved as an Excel 2000 file. If you need to share your workbook with people who still use Excel 95 or 97, you can save the workbook to an earlier version. If you need to share the workbook with Excel 97 users, you can save to a dual Excel 2000/97 format. Select the option Microsoft Excel 97-2000 & 5.0/95 Workbook.



If you attempt to use **Save** for a new, unnamed workbook, Excel will open the Save As dialog box instead.

Closing a Workbook Window

There are several ways to close Excel workbook files.

How to Close a Workbook

Step 1. If necessary, activate the file you wish to close.

Step 2. From the **File** menu, choose **Close**

or

Choose the lower **Close** button located in the top right corner of the Excel window.



Step 3. If the file has not been modified since the time it was saved, the file will close. However, if changes have not been saved, a pop-up dialog box will appear. Do one of the following:

Select **Yes** to save any changes

or

Select **No** to close the window without saving any changes

or

Select **Cancel** to cancel the procedure.



To close multiple open files, press the **Shift** key and from the **File** menu select **Close All**.



Choosing the **Close** button in the upper right corner will close the Excel application.

Switching Between Workbooks

You can open a number of workbooks simultaneously. When working with workbooks as full size windows you only see the contents of one workbook at a time. You can move between open workbooks by using the **Window** menu, or you can select a workbook on the Windows taskbar. The following illustration shows the Taskbar with two open Excel workbooks listed.



How to Switch Between Workbooks

- Step 1. Select the **Window** menu. A list of the opened files will be displayed; the active file appears with a check.
- Step 2. Select the desired workbook from the list.



Ctrl + F6 or *Ctrl + Tab* toggles through all the open workbooks.



If the workbooks are tiled or cascaded, you can switch workbooks by clicking anywhere on the desired workbook window.

How to Switch Between Workbooks Using the Taskbar

- Step 1. On the **Taskbar**, locate the name of the workbook you wish to switch to and select it.



To control whether workbooks appear on the Taskbar, follow these steps. From the **Tools** menu, select **Options**. On the **View** tab of the Options dialog box, place or remove a check in the **Windows in Task bar** checkbox.

Arranging Multiple Workbooks

Multiple workbooks can be opened and viewed simultaneously in tiled workbook windows. Opening multiple workbooks makes it easy to cut and paste data from different workbook files. To return to a full screen view, you must maximize one of the tiled sheets.

How to Arrange Workbook Windows

Step 1. From the **Window** menu, select **Arrange**.

Step 2. From the **Arrange** list, select one of the arrange options.

Arrange Options	
Option	Description
Tile	Displays the active workbook on the left half of the screen and displays the remaining open workbooks in equal horizontal panes on the right side of the screen.
Horizontal	Displays the open workbooks in equal horizontal panes.
Vertical	Displays the open workbooks in equal vertical panes.
Cascade	Displays the open workbooks in tiered panes.

Step 3. Choose **OK**.

Working with Ranges

In this lesson, you will learn the skills necessary to:

- ✓ *Select single and multiple cells with the keyboard and mouse.*
- ✓ *Select rows and columns to manipulate table structure and perform cell formatting.*
- ✓ *Select entire worksheets to format cell content.*
- ✓ *Use group mode to apply cell formatting features to multiple worksheets.*
- ✓ *Create range names to help navigate through worksheets, use in the creation of formulas, and identify data.*
- ✓ *Edit range names to update a defined area.*
- ✓ *Delete range names to make the names available to define other areas.*

Selecting Single and Multiple Ranges

Working with ranges make it easier to format, print, and apply functions to a group of cells. A range can be a single cell, a group of adjacent cells, or a group of non-adjacent cells. There are several ways to select ranges in Excel.

How to Select a Range of Cells with the Mouse

- Step 1. Point to the first cell in the range.
- Step 2. Press the left mouse button and drag across the remaining cells.
- Step 3. Release the left mouse button.

How to Deselect a Range

- Step 1. Click the left mouse button once in any cell to deselect a selected cell(s)
or
Press any **arrow** key.

How to Select a Range Using the First and Last Cell Method

- Step 1. Select the first cell in the range.
- Step 2. Position the mouse over the last cell in the range.
- Step 3. Hold the **Shift** key and select the last cell in the range.



The **First** and **Last Cell** method is useful for selecting large ranges.



If the range extends beyond what is displayed in the window, use the scroll bars until the ending cell is in view.

How to Select a Range Using the Keyboard

- Step 1. Select the first cell in the range.
- Step 2. Hold the **Shift** key while using the **arrow** keys to select a range.

How to Select Multiple Ranges with the Mouse

- Step 1. Select the first range.
- Step 2. Position the mouse over the first cell in the next range.
- Step 3. Press and hold the **Ctrl** key.
- Step 4. Select additional ranges using the click and drag method.
- Step 5. Release the **Ctrl** key.
- Step 6. Repeat Steps 2 through 5 until all ranges are selected.



You cannot select multiple ranges using the keyboard; you must use the mouse in conjunction with the **Ctrl** key to select the secondary ranges.

Selecting Columns and Rows

Selecting columns and rows makes formatting, moving, copying, and deleting large amounts of data easier.

How to Select a Column

Step 1. Select the column letter in the worksheet frame.

	A	B	C
1			
2			
3			
4			
5			
6			

How to Select a Row

Step 1. Select the row number in the worksheet frame.

	A	B	C
1			
2			
3			
4			
5			
6			

How to Select Contiguous Columns/Rows

Step 1. Select the first column/row.

Step 2. Press and hold the **Shift** key, point to the last column letter/row number, and select it

or

Press and hold the left mouse button. Drag across the remaining column letters/row numbers. When finished release the left mouse button.

How to Select Multiple Non-Contiguous Columns/Rows

- Step 1. Select the first column/row.
- Step 2. Press and hold the **Ctrl** key.
- Step 3. Select additional columns/rows.
- Step 4. Release the **Ctrl** key.
- Step 5. Repeat Steps 2 through 4 until all columns/rows are selected.



The mouse pointer should be a large white plus sign when selecting a cell or range; otherwise an Excel function may be selected.

Selecting the Entire Worksheet

Selecting the entire sheet is primarily used to change formats globally. This is done by selecting the worksheet select button.

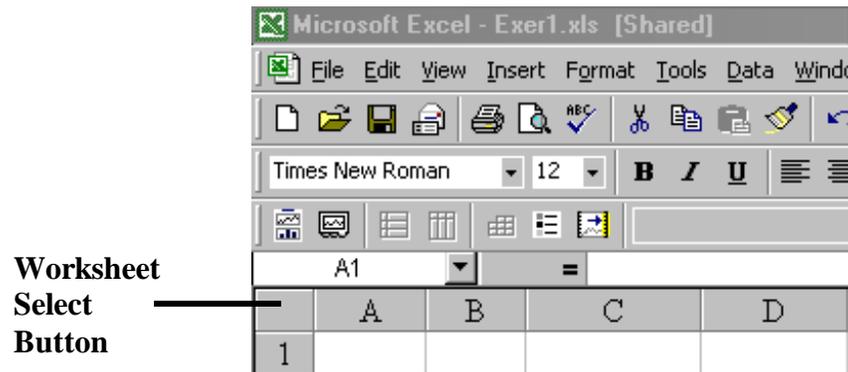
How to Select the Entire Worksheet

Step 1. Select the **Worksheet Select** button located in the upper left corner of the worksheet frame

or

Press **Ctrl + A**.

The illustration below shows the Worksheet Select button.



How to Deselect the Entire Worksheet

Step 1. Once the formatting is complete, activate a cell to deselect the range



This method of formatting is not always recommended in Excel 2000 because of the increased workspace. Formatting the entire worksheet can dramatically increase the file size.

Using the Group Mode

The **Group Mode** is automatically activated when two or more worksheets are selected simultaneously. The cell selections that span the multiple worksheets in the Group Mode are also referred to as 3D references. While in the Group Mode, any data entry or formatting changes made will effect the selected cells on each worksheet in the group. The Group Mode is primarily used for formatting purposes. It is also beneficial for entering the framework for duplicate tables on multiple worksheets.

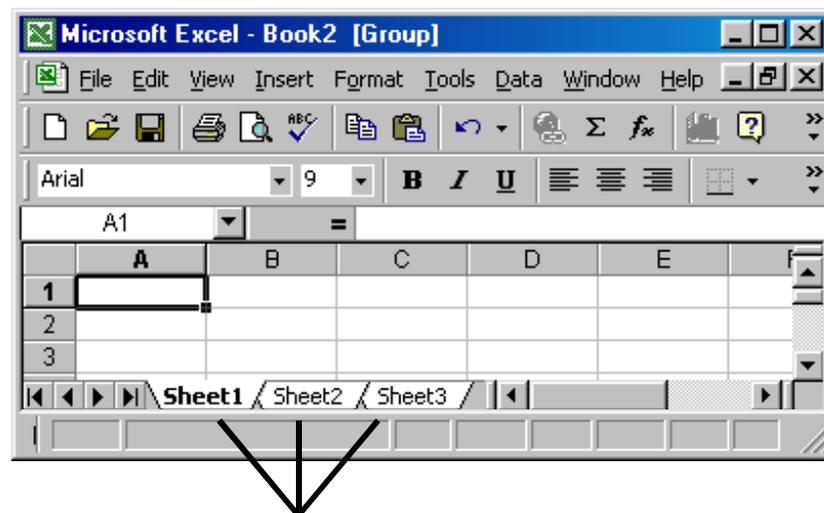
How to Initiate the Group Mode

- Step 1. Select the cell(s) to format.
- Step 2. Hold down the **Shift** key and select the last sheet in the group with the mouse pointer

or

Hold down the **Ctrl** key while selecting the sheet tabs to be include in the group with the mouse.

The screen will look similar to the following:



Selected Worksheets



When selected sheets are in Group Mode, the tabs will appear white and the title bar displays [Group].

How to Deselect Worksheets from the Group

- Step 1. Hold down the **Ctrl** key and select the worksheet tab with the mouse pointer.
- Step 2. Repeat Step 1 until all the undesired worksheets are cleared from the group.

How to Exit the Group Mode

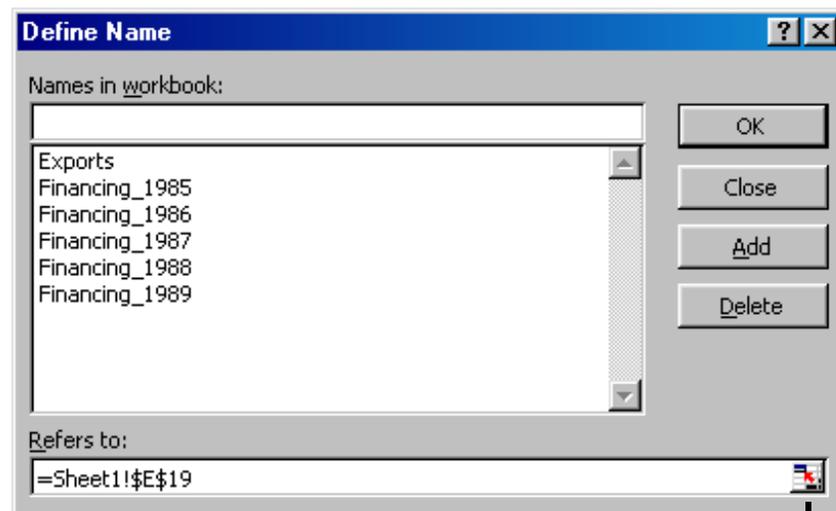
- Step 1. With the mouse, click outside the selected range.
- Step 2. Select any worksheet that is not included in the group

or

If all worksheets are included in the group, select a worksheet other than the initial bolded worksheet name.

Working with Range Names

Range names allow you to refer to cells by name rather than by cell address. For example, you could give a range of exported products with the cell range of **F19:L65** the name **Exports**. Whenever you use that range in a formula or a command, such as printing, you can refer to the range as **Exports**. Range names can be created by using either the **Name Box** or the **Define Name** dialog box. You can also edit and delete Range Names when using the **Define Name** dialog box.



Collapsible Dialog Box

Advantages of Using Range Names in Worksheets

- Names reduce the chance for errors in formulas and commands. Excel recognizes a mistyped name, but it does not recognize an inaccurate range address.
- You can name a cell containing any frequently used constant or formula and use the name in other formulas, rather than remembering the cell address.
- Named ranges expand and contract automatically to adjust to inserted or deleted rows and columns. Range names move with cells when the cells are moved.

- Names make navigating the worksheet easier because you can move to a named range using the Go To command.
- Using names in macros, when referring to specific locations on worksheets, can help make your macros more versatile.
- Names make formulas easy to recognize and maintain. For example, a range name formula =Revenue-Cost is much easier to understand than the formula =A12-C13.
- Names are easier to remember than cell references.
- Range names create an absolute cell reference.

Guidelines for Naming Ranges

- Range names should not start with an exclamation point (!), a dollar sign (\$), or a number. In addition, range names should not include any of the following characters: + - * / ^ = < > # & \$! () or space.
- Range names may be up to 255 characters long.
- Names may be typed in either uppercase or lowercase letters. In formulas, Excel converts all range names to lowercase.
- Do not use names that could be mistaken for cell references, such as FY96 or GS1, or a name that consists of numbers only.
- Each range name must be unique in the workbook file.



The **Collapsible Dialog Box** button will shrink the dialog box to allow the user to view the worksheet and select the desired range.

How to Create a Range Name using the Name Box

- Step 1. Select the range to be named.
- Step 2. Select the **Name Box** and type the desired range name.
- Step 3. Press *Enter*.

How to Create a Range Name using the Define Name Box

- Step 1. Select the range to be named.
- Step 2. From the **Insert** menu, select **Name** and choose **Define**.
- Step 3. In the **Names in Workbook** box, type the desired name range.
- Step 4. Select **Add** to add the range to the list of ranges.
- Step 5. Select **OK** to close the Define Name dialog.



You may also open the Define Name dialog box before selecting a range and use the **Collapse Dialog** button in the **Refers to** text box. With the Define Name dialog collapsed, select the range and click on the **Collapse Dialog** button a second time to expand the Define Name box. Your range will be entered into the **Refers to** text box. Continue with Step 4 above.

How to Edit Range Names

- Step 1. Select the new range.
- Step 2. From the **Insert** menu, select **Name** and choose **Define**
or
Press **Ctrl + F3**.
- Step 3. Select the old range name from the list.
- Step 4. Make the appropriate edits, such as redefining the **Names in Workbook** field or the **Refers to** field.
- Step 5. Choose **OK**.

How to Delete Range Names

- Step 1. From the **Insert** menu, select **Name** and choose **Define**.
- Step 2. From the **Range Name** list, select the appropriate range name.
- Step 3. Select **Delete** to delete the name.
- Step 4. Select **Close** to exit the dialog box.



If a range name used in a formula or function is deleted, the #NAME? error message will appear, because Excel no longer recognizes the named cell range.



Recall from Lesson 1 that you can use the **Name** box to quickly navigate to a range in the open workbook.

Creating Formulas and Functions

In this lesson, you will learn the skills necessary to:

- ✓ *Create formulas to calculate data.*
- ✓ *Create formulas to link worksheets and workbooks.*
- ✓ *Create formulas and functions with absolute and relative references to assure that data is not altered if moved or copied.*
- ✓ *Use AutoSum to add values quickly.*
- ✓ *Use the Paste Function feature to construct simple and complex formulas.*

Creating Formulas

Formulas are used to add, subtract, multiply, or divide numbers entered into your workbook. Formulas can contain cell references or single cell named ranges, such as “TotalEnrollment.” Because formulas perform calculations using cell references, the formula automatically recalculates when you change the contents of any cell the formula is referencing.

Sometimes when copying a formula, you may not want the cell references to change relatively to its new position. To keep the cell references from changing, you will need to make the cell addresses or cell ranges fixed or constant. This is called **absolute referencing**. When you move a formula, the references will remain constant or absolute. If you need to move the formula to a different worksheet, the formula or function must contain sheet references.



The only time references come into play is when you are copying a formula or function.

Operators in Formulas

In addition to cell references, formulas can contain numbers, functions, and any of the following operators:

Operator	Function
() (parentheses)	Controls the order of operations. Calculations within parentheses are performed first.
^ (caret)	Exponent
* (asterisk)	Multiplication
/ (slash)	Division
+ (plus sign)	Addition
- (minus sign)	Subtraction

Operator Order of Precedence

When different operators are used in the same formula, Excel follows the **Standard Order of Mathematical Operations**, which means that it performs the calculations in the order that the operators are listed above. For example, division is done before addition because it is higher on the order of precedence. Therefore, the formula $2+3*2$ would equal 8 because the multiplication is performed first. To alter the order of precedence in a formula, enclose the calculation you want performed first in parentheses. Therefore, $(2+3)*2$ would equal 10 because the addition is performed first. An easy way to remember the order of precedence is to remember the phrase “**P**lease **E**xcuse **M**y **D**ear **A**unt **S**ally” (parentheses, exponents, multiplication, division, addition, subtraction).

How to Enter Formulas Using the Mouse

- Step 1. Select the cell that will contain the formula.
- Step 2. Type an *equal sign* (=).
- Step 3. Choose the first cell in the formula.
- Step 4. Type the mathematical operator.
- Step 5. Choose the next cell in the formula.
- Step 6. Repeat Steps 4 and 5 as needed to complete the formula.
- Step 7. To finish the formula, press *Enter*.

How to Enter Formulas with the Keyboard

- Step 1. Select the cell that will contain the formula.
- Step 2. Type an *equal sign* (=).
- Step 3. Type the address of the first cell in the formula.
- Step 4. Type the mathematical operator.
- Step 5. Type the address of the next cell in the formula.
- Step 6. Repeat Steps 4 and 5 as needed to complete the formula.
- Step 7. To finish the formula, press *Enter*.

How to Create Multi-Sheet Formulas

Step 1. Place the cell pointer on the cell that will contain the formula.

Step 2. Type an *equal sign* (=).

Step 3. With the mouse, move to another worksheet and select the cell
or

Type the worksheet name, an exclamation point (!), and the cell address.

Example: JAN!B35

Step 4. Type the mathematical operator.

Step 5. Repeat Steps 3 and 4 as needed to complete the formula.

Step 6. To finish the formula, press *Enter*.

Example: =JAN!B35-FEB!G17



It is much quicker and more accurate to use the mouse and let Excel insert the proper syntax.

How to Create Multi-Workbook Formulas

Step 1. Open the source workbook to access the source cells.

Step 2. Activate the target workbook.

Step 3. Select the cell that will contain the formula.

Step 4. Type an *equal sign* (=).

Step 5. Switch to the source workbook.

Step 6. Select the source cell.

Step 7. If wanted, type an operator and repeat Steps 5 and 6 as necessary.

Step 8. Press *Enter*.



Entering file links with the mouse will automatically supply the proper syntax and references for the formula.



Cell references from other workbooks are automatically formatted as absolute references.

How to Use Range Names in Formulas

Step 1. Start the formula by typing an *equal sign*.

Step 2. Type in the range name

or

Press **F3** and select the name from the **Paste Names** dialog box.

Step 3. Select **OK**.



The **List** key (**F3**) will allow you to access range names from the **Range Names** dialog box.



If a range name used in a formula or function is deleted, the #NAME? error message will appear, because Excel no longer recognizes the named cell range.

How to Make a Cell an Absolute Reference

- Step 1. Begin entering a formula in the desired cell.
- Step 2. Use the mouse to select a cell you wish to reference in the formula
- or
- Type the cell reference.
- Step 3. For any cell reference you wish to make absolute, use the guidelines in the following table:

Absolute Cell References	
Format	Function
\$A\$1	Absolute cell reference. This reference will always refer to cell A1 regardless of copy or move operations on the cell containing the formula. This is the most common form of an absolute cell reference.
\$A1	Absolute column reference. If the formula is copied the reference to the column (in this case column A) will not change but the row number will change relative to the new location.
A\$1	Absolute row reference. If the formula is copied to a new location the reference to the column (in this case column A) will change relative to the new location, while the reference to the row (here, row 1) will remain absolute.
A1	Relative reference. If the formula is copied to a new location, the cell reference will change relative to the new location.

Using Functions

Excel is equipped with a series of built-in command features, called **functions**, that are designed to replace complex formulas and perform a variety of tasks.

Nearly all functions accept one or more **arguments**. An argument is a specific value (it may be text or numeric), which the function requires in order to return a result.

Excel contains more than 300 functions which are divided into the following 12 categories:

Function Category	Category Description
Most Recently Used	Most commonly used functions such as AVERAGE, IF, and SUM.
All	Comprehensive list of all functions.
Financial	Includes a number of finance-related equations, such as calculating the internal returns on an investment or a payment on a loan.
Date and Time	Manipulates dates and time stamps on spreadsheets. Some examples are DATE and NOW.
Math & Trig	Similar to statistical functions, except they perform calculations on a single number, rather than on a range of numbers. Includes trigonometric functions.
Statistical	Performs calculations on blocks of values in the spreadsheet. They are the most widely used class of Excel functions. Some examples are SUM, AVERAGE, MAX, and MIN.
Lookup & Reference	Performs a variety of tasks, most notably the looking up of values in a table (LOOKUP, VLOOKUP, HLOOKUP).
Database	The database worksheet function is helpful when you need to analyze values in a list that meet a specific condition or criteria. For example, in a list that contains sales information, you can count all the rows or records in which the sales are greater than 1,000 but less than 2,500.

TABLE CONTINUES ON
NEXT PAGE



Function Category	Category Description
Text	With text functions, you can manipulate text strings in formulas. For example, you can change the case or determine the length of a text string.
Logical	You can use the logical functions either to see whether a condition is true or false or to check for multiple conditions. For example, you can use the IF function to determine whether a condition is true or false: One value is returned if the condition is true, and a different value is returned if the condition is false.
Information	Use an information worksheet function to determine the type of data stored within a cell. The information functions include a group of worksheet functions known as the IS functions and return TRUE if the cell meets a condition. For example, if the cell contains an even value, the ISEVEN worksheet function returns TRUE. If you need to determine whether blank cells exist in a range of cells, you can use the COUNTBLANK worksheet function to count the number of blank cells in a range of cells, or you can use the ISBLANK worksheet function to determine whether one cell in the range is blank.
User Defined	If you use a particularly complex calculation in many formulas or calculations that require several formulas because existing worksheet functions do not meet your needs, you can create custom functions. These functions, known as user-defined functions, are created by using Visual Basic for Applications. User-defined functions must be stored in the Personal.xls workbook to be used in the workbooks.

Adding Values Using the SUM Function

The most often used functions are **SUM** and **AVERAGE**, which are located in the **Statistical** category. The **SUM** function calculates a total for the cells specified and the **AVERAGE** function calculates the average.

How to Use the SUM Function

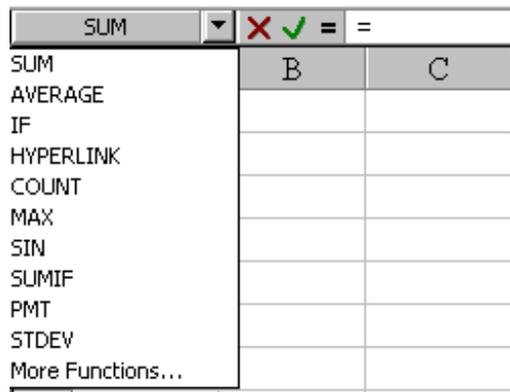
Step 1. Select the cell that will contain the formula.

Step 2. Type the *equal sign* (=)

or

In the **Formula Bar**, select the *equal sign* (=).

Step 3. Select the **SUM** option from the drop-down list in the formula bar.



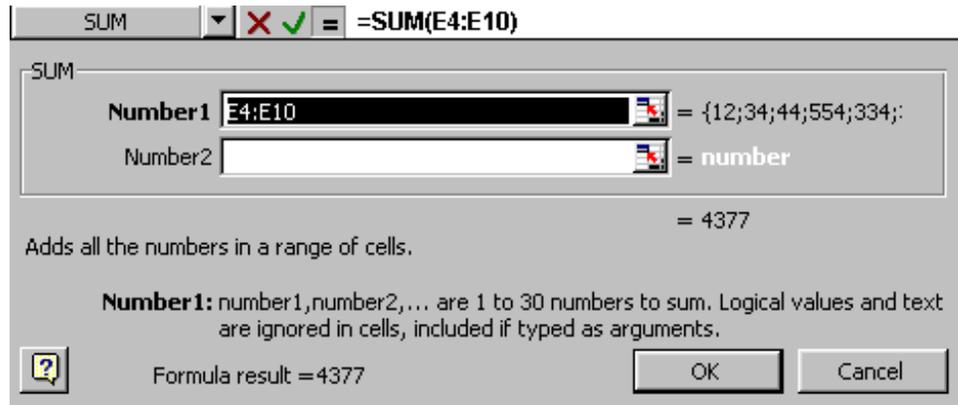
Step 4. When the **Formula Palette** appears, select the collapsible dialog box button and highlight the range to be added.

Step 5. When the correct range is selected, press *Enter*.

STEPS CONTINUE ON NEXT
PAGE



The formula palette will appear similar to the following:



Step 6. After the range appears in the **Formula Palette**, check the formula result at the bottom of the dialog.

Step 7. Choose **OK**.



When selecting multiple ranges to be used in a function be sure to put a comma or hold the **Ctrl** key between each range or argument. If you do not, you will redefine the initial range.

Using AutoSum

The **AutoSum** button on the toolbar uses the **SUM** function to add the values of a specified block. Using the **AutoSum** feature, you can quickly total a single row or column, multiple rows or columns, a specified range of cells on a worksheet, or a three-dimensional range of cells that spans multiple worksheets in a workbook. The **AutoSum** feature can be used in either of two ways: by first selecting the range of cells to be totaled, or by using the **AutoSum** feature in an empty cell and allowing Excel to make an educated guess as to which cells are being added.

How to Use AutoSum

- Step 1. Select a range of cells containing the values that should be added and the cell where the result should appear.
- Step 2. Choose the **AutoSum** button.



You can use the **AutoSum** feature without first selecting the range of cells to be added by selecting the cell that you want to contain the results and clicking the **AutoSum** button. The resulting formula, however, may need editing because the range Excel selects may not match the cells you wish to sum.

Using the AVERAGE Function

The **AVERAGE** function will add the cells and then divide the sum by the number of cells in the list.

How to Use the AVERAGE Function

- Step 1. Select the cell that will contain the function.
- Step 2. Type **=AVERAGE** followed by an open parentheses (.
- Step 3. Select or type the block of cell(s) you wish to average.
- Step 4. Repeat Step 3 until all the blocks are selected.
- Step 5. Type a right parenthesis).
- Step 5. Press **Enter**.



When selecting multiple ranges to be used in a function be sure to put a comma or hold the **Ctrl** key between each range or argument. If you do not, you will be redefining the initial range.



You may also use the same steps described in Adding Values Using the Sum Function, Page 53, as well as using the steps described in this section to find a sum, simply by replacing the word **AVERAGE** with **SUM**.

Using the Paste Function Wizard

The **Paste Function** wizard is a dialog box designed to help in creating, editing, and debugging formulas. You can use the **Paste Function** wizard dialog box to create new formulas using functions or to edit an existing formula. The **Paste Function** wizard dialog box is most useful when you are working with complex formulas and functions.

Functions are arranged by category on the left side of the dialog box. For any selected function category, a list of the specific functions will appear on the right. Selecting a function will display a definition of the function along the bottom of the dialog box. After you have selected the appropriate function and chosen OK, you will then use the **Formula Palette** to select the conditions and ranges of the function.

How to Use the Paste Function Wizard

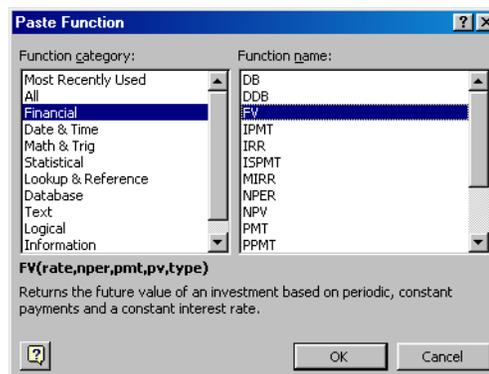
- Step 1. Select the cell that will contain the formula.
- Step 2. From the **Standard** toolbar, choose the **Paste Function** button



or

From the **Insert** menu, select **Formula**.

A dialog box similar to the following will appear:

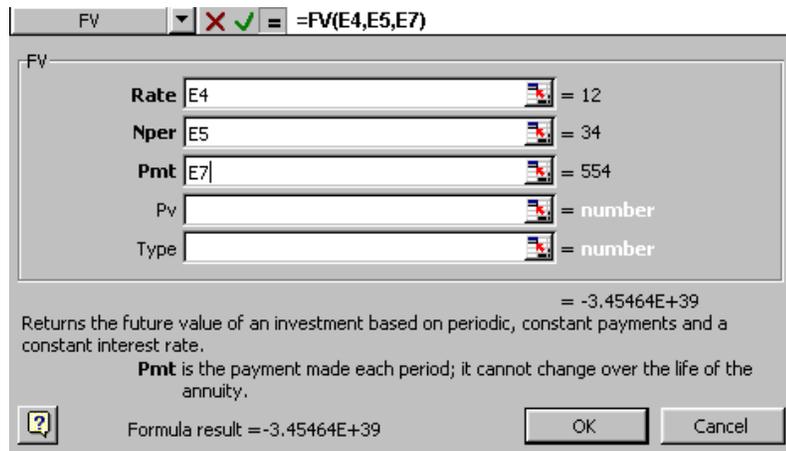


STEPS CONTINUE ON NEXT
PAGE



- Step 3. Select a function category from the list on the left.
- Step 4. Select a function name from the list on the right.
- Step 5. Choose **OK**.

The **Formula Palette** will appear similar to the following (the actual appearance will depend upon the formula selected in Step 4):



- Step 6. Edit the formula to select the conditions and ranges the function may require.

Copying and Moving Data

In this lesson, you will learn the skills necessary to:

- ✓ *Copy and move formulas, functions, and data to update table structure.*
- ✓ *Use the AutoFill feature to quickly fill a range of cells with data.*

Copying Text Labels and Values

Copying text and value data works similar to using copy and paste in other Windows applications.

How to Copy Text Labels and Values

Step 1. Select the cell(s) to be copied.

Step 2. Right-click and from the Shortcut menu, select **Copy**

or

From the **Standard** toolbar, choose the **Copy** button.



Step 3. Position the cell pointer in the upper left hand area of where you want to insert the copied data.

Step 4. Right-click and from the Shortcut menu, select **Paste**

or

From the **Standard** toolbar, choose the **Paste** button.



Copying Formulas

When formulas are copied, Excel automatically adjusts the relative cell references for the new row or column where the formula is pasted. This is called **relative referencing**. If the formula contains absolute cell references, these are not adjusted during the copy operation.

Example 1. In cell A3 is the following formula, =A1+A2. Note that the references to cells A1 and A2 are relative. If the formula is copied to cell E3 the formula will now read as =E1+E2.

Example 2. In cell A3 is the following formula, =\$A\$1 + \$A\$2. Note that the references to these cells are absolute. If the formula is copied to cell E3 the formula will still read as =\$A\$1 + \$A\$2

Example 3. In cell A3 is the following formula = A1 + \$A\$2. Note that the reference to A1 is relative but the reference to A2 is absolute. If the formula is copied to cell E3 the formula will read as = E1 + \$A\$2

How to Copy Formulas

Step 1. Select the cell(s) to be copied.

Step 2. Right-click and from the Shortcut menu, select **Copy**

or

From the **Standard** toolbar, choose the **Copy** button.



Step 3. Position the cell pointer in the upper left hand area of where you want to insert the copied data.

Step 4. Right-click and from the Shortcut menu, select **Paste**

or

From the **Standard** toolbar, choose the **Paste** button.



Copying and Pasting Links

A link is a connection or reference between two files or data items, so that a change in the first item is automatically reflected by a change in the second item. The first item, which contains the information being referenced, is the *source* and the other item, which will reflect the changes in the source, is the *target*.

The **Paste Link** command will create a reference link between large areas of data such as an entire table or column. This feature is excellent for creating summary tables and copying large areas of data. When you paste link data, Excel creates a formula that manages the reference to the source data.

You can create a link on a worksheet that references:

- A single cell in another worksheet or workbook
- A range of cells in another worksheet or workbook
- Another worksheet in the same or another workbook.

How to Use Paste Link

Step 1. Select the source cell(s).

Step 2. Copy the selected cell(s) to the clipboard.

Step 3. Select the target cell.

Step 4. From the **Edit** menu, select **Paste Special**

or

Right-click and from the Shortcut menu, choose **Paste Special**.

STEPS CONTINUE ON NEXT
PAGE



The following dialog box appears:



Step 5. Select the **Paste Link** button.



If you open a workbook containing a link to another workbook not currently opened, Excel will ask if you wish to update the link. Choose **Yes** to update the workbook to be opened or **No** to open the workbook without updating. In the latter case, the linked values will appear the same as the last time you saved the workbook.

Moving Labels, Values, and Formulas

When formulas are moved, Excel maintains the original cell references where the formula is pasted. This is called **absolute referencing**. Moving text labels or values is the same as conducting a cut and paste operation.

How to Move Text Labels, Values, and Formulas

Step 1. Select the cell(s) to be copied.

Step 2. Right-click and from the Shortcut menu, select **Cut**

or

From the **Standard** toolbar, choose the **Cut** button.



Step 3. Position the cell pointer in the upper left hand area of where you want to insert the copied data.

Step 4. Right-click and from the Shortcut menu, select **Paste**

or

From the **Standard** toolbar, choose the **Paste** button.



When moving a formula from one sheet to another, Excel will automatically add the sheet references to the formula.

Modifying the Worksheet Structure

In this lesson, you will learn the skills necessary to:

- ✓ *Insert cells.*
- ✓ *Insert rows and columns.*
- ✓ *Resize rows and columns.*
- ✓ *Hide and unhide rows and columns.*

Inserting Cells

Inserting partial rows or columns into a worksheet allows you to add cells to a particular table which may affect other tables on the same worksheet. It is recommended that whole rows or columns be selected when inserting rows and columns.

How to Insert Cells

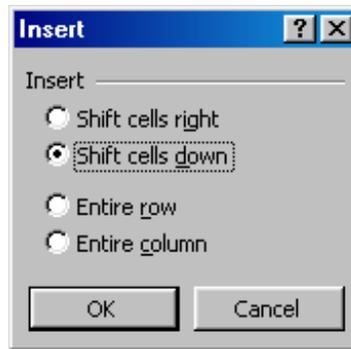
Step 1. Highlight the area where the new cell(s) will be added.

Step 2. Right-click and from the Shortcut menu, select **Insert**

or

From the **Insert** menu, select **Cells**.

The following dialog box will appear:



Step 3. Choose the appropriate **Shift Cells** option.

Dimension	Cell Movements
Shift Cells Right	Inserts cells to the left of the current cell.
Shift Cells Down	Inserts cells above the current cell.
Entire Row	Inserts an entire row.
Entire Column	Inserts an entire column.

Step 4. Select **OK**.

Inserting Rows and Columns

As you use a worksheet, it is often necessary to insert new data between the rows and/or columns of existing data. Excel allows you to insert one or more rows or columns between existing ones. New rows are inserted directly above the selected row. New columns are inserted to the left of the selected column.

Formulas are affected by these actions, as illustrated in the following examples:

- If you have the formula **=A1+A2+A3** and insert a blank row between rows 2 and 3, the formula will follow the relative cell reference and change to **=A1+A2+A4**.
- If a formula contains a range (e.g., **=SUM(A1:A3)**) and a blank row is inserted somewhere between that range of cells, the formula will adjust to include the new row (e.g., **=SUM(A1:A4)**).

However, if you insert a row after the last cell in the range, the new row will not be included.



The same types of changes will occur when inserting columns.

How to Insert Rows

Step 1. From the worksheet frame, select the row(s) on top of which the inserted rows will be placed.

Step 2. Right-click and from the Shortcut menu, select **Insert**

or

From the **Insert** menu, choose **Row**.

How to Insert Columns

Step 1. From the worksheet frame, select the columns where you want the new columns to be placed.

Step 2. Right-click and from the Shortcut menu, select **Insert**

or

From the Insert menu, select **Column**.

Resizing Rows

In a new workbook, the standard row height is set to accommodate the normal print size or font used in the workbook. When the size of the characters is changed, Excel automatically adjusts the row height for the change. You can also adjust the row height through the **Format** menu or by using the mouse.

Points on Row Height

- Row height is measured in points. The default row height is 12.75 points.
- For large tables, the row height should be set one point size larger than the font size.

How to Adjust the Row Height Automatically with the Mouse

Step 1. Point to the row border below the row number. Use the following illustration as a guide.

	A	B	C
1		1999	2000
2	External Fir	45,344	145,440
3	Draws on L	101,334	2,990,343
4	Trade Bala	45,920	#####
5			

Double-click here to adjust the height of Row 4

Step 2. When the mouse changes to a cross, double-click. The row above automatically adjusts to fit the tallest entry in that row.

How to Adjust the Row Height Manually with the Mouse

- Step 1. Point to the row border below the row number.
- Step 2. When the mouse changes to a cross, drag the row border until the mouse pointer reaches the appropriate position. To increase the row height drag down or to decrease the size drag up.

How to Set an Exact Row Height

- Step 1. Select the appropriate row(s).
- Step 2. From the **Format** menu, select **Row**.
- Step 3. From the **Row** submenu, choose **Height**.

The following dialog box will appear:



- Step 4. In the **Row height:** field, enter the appropriate row height.
- Step 5. Select **OK**.

How to Adjust the Row Height to Fit a Specific Cell

- Step 1. Select the appropriate cell(s).
- Step 2. From the **Format** menu, select **Row**.
- Step 3. From the **Row** submenu, choose **AutoFit**.

Resizing Column Widths to Display Data Effectively

You may want to widen a column to accommodate long text labels or values or make columns narrower to save space on the worksheet. If a column is too narrow, text labels may be cut off, or values may appear as number signs. You may resize a column using the mouse or the **Format** menu.

Points on Adjusting Column Width

- When using the mouse to adjust column widths, you are only adjusting a single column. To change multiple columns simultaneously, select the columns and use the options found within the **Format** menu.
- In a standard table, all data columns should be the same width.
- The **AutoFit Selection** option adjusts the width of a column based on a single cell in the column, not the entire contents of the column.

How to Adjust the Column Width to Display All Cell Contents Using the Mouse

Step 1. To adjust column width, point to the column border to the right of the column heading letter. Use the following illustration as a guide.

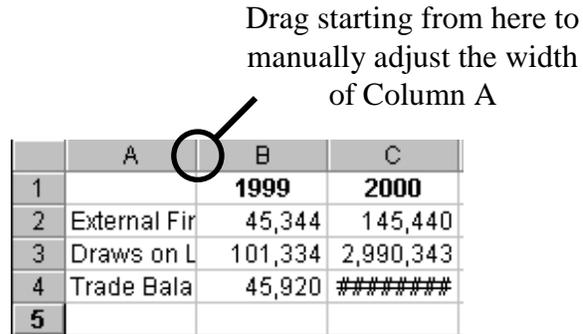
Double-click here to
adjust the width of
Column A

	A	B	C
1		1999	2000
2	External Fir	45,344	145,440
3	Draws on L	101,334	2,990,343
4	Trade Bala	45,920	#####
5			

Step 2. When the mouse pointer changes to a cross, double-click. The column to the left automatically adjusts to fit the longest entry in that column.

How to Adjust the Column Width Manually Using the Mouse

- Step 1. To adjust column width, point to the column border to the right of the column heading letter. Use the following illustration as a guide.

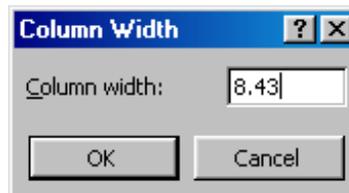


- Step 2. When the mouse pointer changes to a cross, drag the column border until the mouse pointer reaches the appropriate position. To increase the column width drag the mouse to the right; to decrease the width drag to the left.

How to Set an Exact Column Width

- Step 1. Select the appropriate column(s).
- Step 2. From the **Format** menu, select **Column**.
- Step 3. From the **Column** submenu, choose **Width**.

A dialog box similar to the following will appear:



- Step 4. In the **Column width:** field, enter the desired width.
- Step 5. Select **OK**.

How to Adjust the Column Width to Fit a Specific Cell

- Step 1. Select the cell(s) to base the column width on.
- Step 2. From the **Format** menu, select **Column**.
- Step 3. From the **Column** submenu, choose **AutoFit Selection**.

How to Reset a Column Width

- Step 1. Select the appropriate column(s).
- Step 2. From the **Format** menu, select **Column**.
- Step 3. From the **Column** submenu, choose **Standard Width**. The default column width automatically appears in the text field.
- Step 4. Select **OK**.

Hiding and Unhiding Rows and Columns

Temporarily hiding rows and columns can help in printing and in managing large spreadsheets.

How to Hide a Row

- Step 1. Select the row(s) you wish to hide.
- Step 2. From the **Format** menu, select **Row**.
- Step 3. From the **Row** submenu, select **Hide**.

How to Hide a Column

- Step 1. Select the column(s) you wish to hide.
- Step 2. From the **Format** menu, select **Column**.
- Step 3. From the **Column** submenu, select **Hide**.

How to Unhide a Row

- Step 1. Select a range of rows that includes at least one row above and one below the rows you wish to redisplay.
- Step 2. From the **Format** menu, select **Row**.
- Step 3. From the **Row** submenu, select **Unhide**.

How to Unhide a Column

- Step 1. Select a range of columns that includes at least one column to the left and one column to the right of the columns you wish to redisplay.
- Step 2. From the **Format** menu, select **Column**.
- Step 3. From the **Column** submenu, select **Unhide**.



If the first row or column of a worksheet is hidden, choose **Go To** on the **Edit** menu. Type **A1** in the **Reference** box, and choose **OK**. From the **Format** menu, choose either **Row** or **Column** and then choose **Unhide**.

Formatting Data

In this lesson, you will learn the skills necessary to:

- ✓ *Format text labels and values.*
- ✓ *Align data in cells and across columns.*

Formatting Cell Content

Excel allows you to change the appearance of text. Additional formatting features can be found by accessing the **Format Cells** dialog box.

How to Format Cell Text

- Step 1. Select the cell(s) you want to change.
- Step 2. From the **Formatting** toolbar, select from the following buttons:

Button	Button Name	Function
	Font	Lists the available fonts.
	Font Size	Lists the available sizes for the font shown in the Font icon text box.
	Bold	Applies bold formatting to selected characters in cells, text boxes, buttons, or chart text.
	Italic	Applies italic formatting to selected characters in cells, text boxes, buttons, or chart text.
	Underline	Applies underline formatting to selected characters in cells, text boxes, buttons, or chart text.

- Step 3. Repeat Step 2 until the cell(s) are formatted.

Aligning Cell Content

By default, text is aligned to the left and numbers and dates are aligned to the right, although cell alignment may be changed. The alignment of data can be changed by using either the toolbar justification buttons or the alignment options in the **Format Cells** dialog box.

Button	Alignment
	Aligns data on the left.
	Centers data between the left and right.
	Aligns data on the right.
	Centers data across a selected range of columns, while merging all the columns into one cell.
	Decreases the indent within a cell.
	Increases the indent within a cell.

How to Align Cell Content

- Step 1. Select the cell(s).
- Step 2. From the **Formatting** toolbar, select one of the justification buttons.

Formatting Numeric Data

Once you have entered all the values and formulas into your workbook, you will probably want to enhance its appearance. When you change the format of numeric data, you change the appearance only; the underlying value does not change.

How to Format Numbers Using the Keyboard

Step 1. Select the cell(s) you want to format.

Step 2. Choose one of the following keystrokes to format the numbers:

Data Entered	Keystroke	Resulting Format
9267.35	<i>Ctrl + Shift + 1</i>	9,267.35
9,267.35	<i>Ctrl + Shift + ~</i>	9267.35



Excel 2000 recognizes certain numeric forms, mainly, the dollar sign (\$), percent symbol (%), minus sign (-), and comma (,) characters.



To format currency using the euro symbol, you must apply a currency format to the range. Select the desired range, then select the **Format, Cells** menu command. Click on the **Number** tab, select **Currency** from the Category area, and select the euro from the **Symbol** drop-down box.

How to Format Numeric Data Using the Formatting Toolbar

- Step 1. Select the cell(s) you want to format.
- Step 2. From the **Formatting** toolbar, choose the desired button.

Button	Numeric Format
	Applies the currently defined Currency style to selected cells.
	Applies the currently defined Percent style to selected cells.
	Applies the currently defined Comma style to selected cells.
	Adds one decimal place to the number format each time you click the button.
	Removes one decimal place from the number format each time you click the button.

- Step 3. Repeat Step 2 until the cell(s) are formatted.

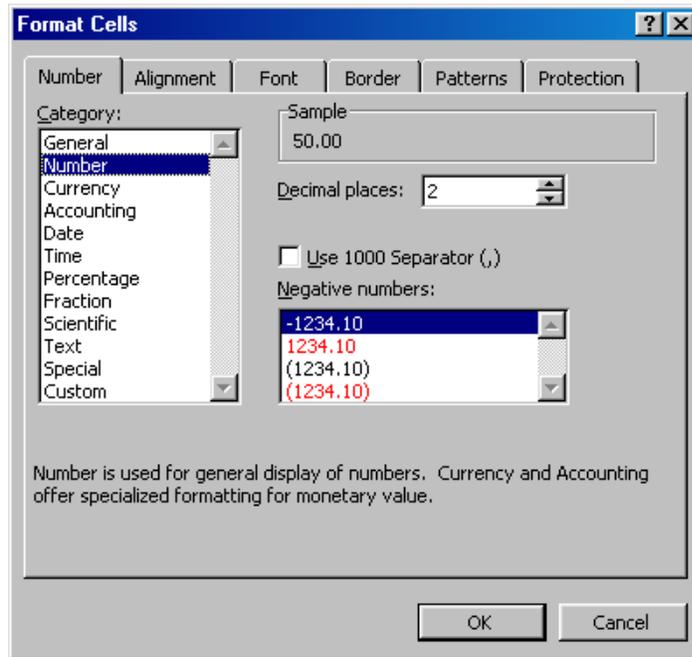
How to Format Numbers Using the Format Cells Dialog

- Step 1. Select the cell(s) you want to format.
- Step 2. From the **Format** menu, choose **Cells**.

STEPS CONTINUE ON NEXT PAGE



A dialog box similar to the following will appear:



Step 3. Choose the appropriate category. The following table outlines each format category:

Category	Description
General	No specific format is applied.
Number	General display of numeric values. You can control the number of decimal places and the format for negative and positive values.
Currency	Used to display currency values. In addition to the Number format, you can also choose from a variety of currency symbols, including the Euro.
Accounting	Like the Currency format, but currency symbols and decimal points line up in columns.
Date	Used for general display of dates.
Time	Used for general display of time.

TABLE CONTINUES ON
NEXT PAGE



Category	Description
Percentage	Multiplies the cell value by 100 and adds a percent (%) symbol.
Fraction	Displays values in a variety of fractional formats.
Scientific	Numeric values are displayed in exponential format.
Text	Displays numeric values as text (although they may still be manipulated as numbers).
Special	Used for special formats such as U.S. Zip codes, Social Security numbers, and telephone numbers.
Custom	Used to create customized formats.

Step 4. For the selected category, set the desired options available under the **Sample** area.

Step 5. Select **OK**.

Formatting Row Subheadings, Sources, and Footnotes

Standards require that secondary row headings be indented an equivalent of the three spaces. Excel 2000 has a quick way to add and delete these spaces through the indent feature. Each click of the indent button equals three blank spaces. This method of indenting is also ideal for formatting sources, notes, and footnotes.

Points on Formatting Row Headings, Sources, Notes, and Footnotes

- Row headings are left justified. Indent a sub-row heading three spaces; if it runs to two lines or more, indent the second and subsequent lines six spaces and place all related numerical data on the lowest line of the entry.
- Place the sources two hard returns (i.e., one blank line or row) below the horizontal line marking the end of the table. Each table should indicate a source or sources. Indent the source line using three spaces.
- Place notes two hard returns (i.e., one blank line or row) below the sources. Indent the note line using three spaces.
- Place the first footnote two hard returns (i.e., one blank line or row) below the source or note line. Indent the first line of all footnotes using three spaces.

How to Indent Sub-Row Headings

- Step 1. Select the cell(s) which contain the sub-row headings
- Step 2. From the **Formatting** toolbar, choose the **Increase Indent** button



- Step 3. Repeat Step 2 for each level of sub-row heading.



One click on the **Increase Indent** button is equivalent to three spaces.

How to Remove a Sub-Row Heading Indent

- Step 1. Select the cell(s) that contains the sub-row heading.
- Step 2. From the **Formatting** toolbar, select the **Decrease Indent** button until the cell's content is indented the proper amount.



How to Format Sources, Notes, and Footnotes

- Step 1. Select the cell and press the **Increase Indent** button once.
- Step 2. Type the source, note, or footnote.
- Step 3. Select the range of cells to accommodate the source, note, or footnote.



The range of cells selected should not exceed the table width.

- Step 4. From the **Edit** menu, select **Fill**.
- Step 5. From the **Fill** submenu, choose **Justify**.
- Step 6. Repeat Steps 1 through 5 for each source, note, and footnote.



Ensure that the justification range for the source, note, or footnote contains no data. If cells in the selected range contain data, that data will be lost during the justification of the source, note, or footnote. It may be necessary to insert rows when performing this procedure.

Printing Workbooks

In this lesson, you will learn the skills necessary to:

- ✓ *Change paper size, page orientation, and margin to properly present data on paper.*
- ✓ *Add and remove printed gridlines to properly print data.*
- ✓ *Preview worksheet data before printing.*
- ✓ *Print the entire worksheet and selected ranges to view data on paper.*
- ✓ *Designate a default print range to set a fixed printing range.*
- ✓ *Center a table on the printed page.*
- ✓ *Set and remove page breaks.*

Changing the Page Setup Options

When you prepare a worksheet for printing, you may need to adjust page orientation or page margins to fit a worksheet on a page. You may also control the display of headers and footers, column and row headings, and how a table is aligned on the printed page. All of these properties are set using **Page Setup**.

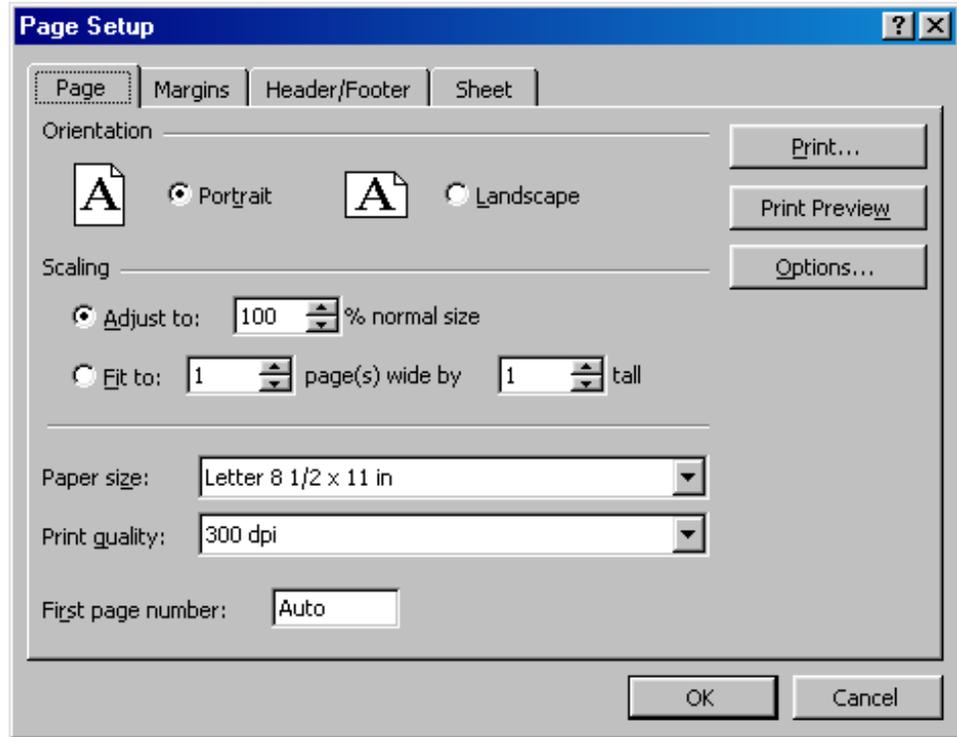
Adjustments made through **Page Setup** are specific to the current workbook.

How to Change the Paper Size

Step 1. From the **File** menu, select **Page Setup**.

Step 2. From the **Page Setup** dialog box, select the **Page** tab.

A dialog box similar to the following will appear:



Step 3. From the **Paper Size** drop-down list, choose a paper size.

Step 4. Select **OK**.

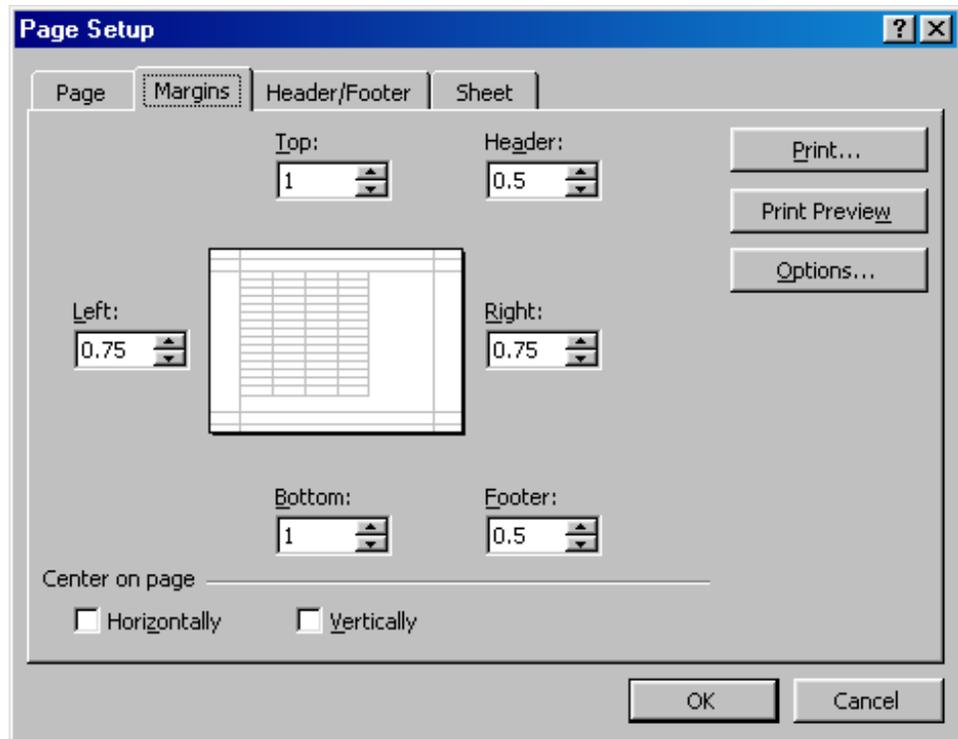
How to Change Page Orientation

- Step 1. From the **File** menu, select **Page Setup**.
- Step 2. From the **Page Setup** dialog box, select the **Page** tab.
- Step 3. From the **Page** tab, Select either the **Portrait** or the **Landscape** radio button.
- Step 4. Select **OK**.

How to Change Page Margins

- Step 1. From the **File** menu, choose **Page Setup**.
- Step 2. From the **Page Setup** dialog box, select the **Margins** tab.

The following dialog box will appear:

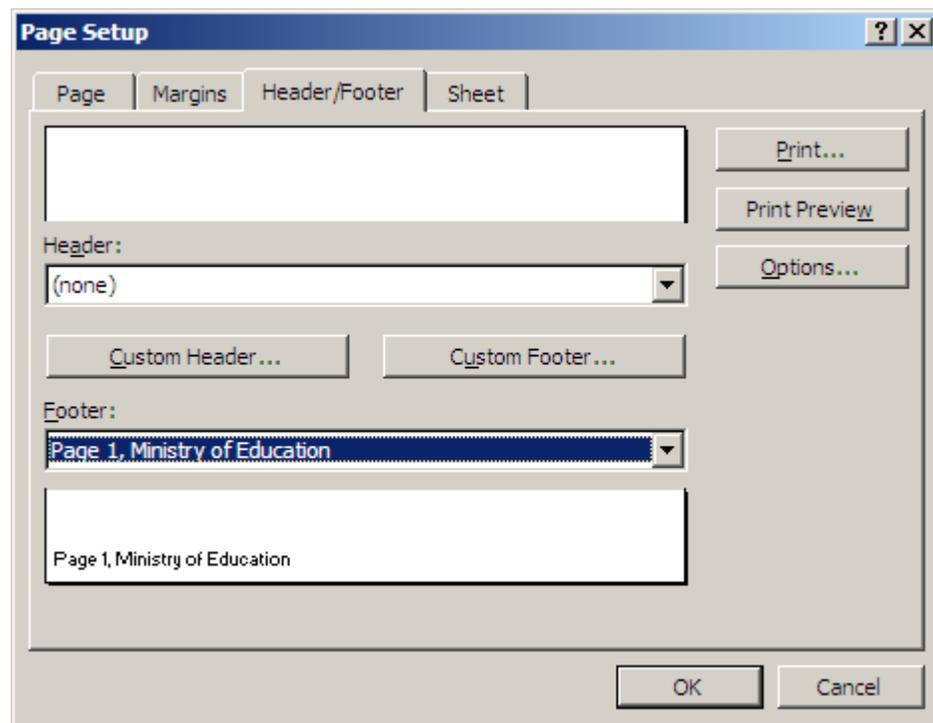


- Step 3. Select the **Left**, **Right**, **Top**, or **Bottom** fields, and change the margin value.
- Step 4. Choose **OK**.

How to Remove a Footer

- Step 1. From the **File** menu, choose **Page Setup**.
- Step 2. From the **Page Setup** dialog box, choose the **Header/Footer** tab.

The following dialog box will appear:



- Step 3. In the **Footer** drop-down box, choose **None**.
- Step 4. Choose **OK**.

Working with Sheet Options

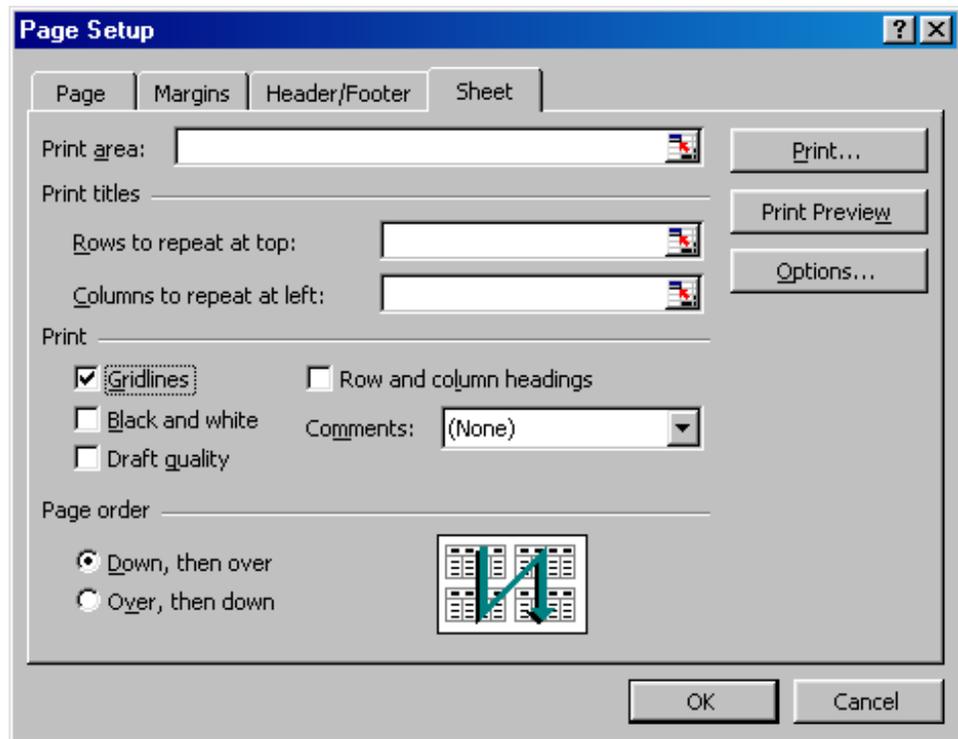
The **Sheet** tab on the **Page Setup** dialog controls many aspects of how a worksheet is printed. The features of the **Sheet** tab are explained in the table on the following page.

How to Set Sheet Options

Step 1. From the **File** menu, choose **Page Setup**.

Step 2. From the **Page Setup** dialog box, choose the **Sheet** tab.

The following dialog box will appear:



STEPS CONTINUE ON NEXT PAGE



Sheet Options

Option	Description
Print area	Defines a print range either by entering a range name or cell reference, or by using the mouse to define a print range.
Rows to repeat at top	Defines a cell or range that repeats along the top of each page.
Columns to repeat at left	Defines a cell or range that repeats along the left side of each page.
Gridlines	Controls whether gridlines appear on the page.
Black and white	Use this option if your worksheet contains formatted color but you are using a black and white printer.
Draft quality	When selected, Excel will not print gridlines and most graphics on the worksheet.
Row and column headings	When checked, row and column headings (in the A1 style) are printed.
Comments	Controls whether comments are printed and if so, whether they appear at the end of the sheet or as displayed on the sheet. The latter choice prints the comments as they appear when viewing the sheet, i.e., hidden comments will not print.
Page order	Sets the order of pagination for worksheets that will not fit a single page. Choosing between the two options will update the result diagram.

Step 3. Select or adjust the desired options as necessary.

Step 4. Choose **OK**.

Previewing Worksheets

The **Print Preview** option allows you to view and modify the page before you print.

How to Preview a Worksheet

Step 1. From the **Standard** toolbar, select the **Print Preview** button



or

From the **File** menu, select **Print Preview**.

Step 2. Optional: Choose the buttons across the top of the Print Preview screen to navigate through the worksheets or change the worksheet appearance.

Step 3. Choose the **Close** button to exit Print Preview.



How to Preview a Selected Area

Step 1. Select the desired area.

Step 2. From the **File** menu, select **Print**.

Step 3. From the **Print** dialog box, choose the **Selection** radio button.

Step 4. From the **Print** dialog box, choose the **Preview** button.

Step 5. Optional: Choose the buttons across the top of the Print Preview screen to navigate through the worksheets or change the worksheet appearance.

Step 6. Choose the **Close** button to exit Print Preview.



The Print Preview Window

When you print preview a worksheet or chart, the result is displayed in the Print Preview window. You cannot edit or change any of the material displayed. Note that you must use the **Close** button to return to the active worksheet.

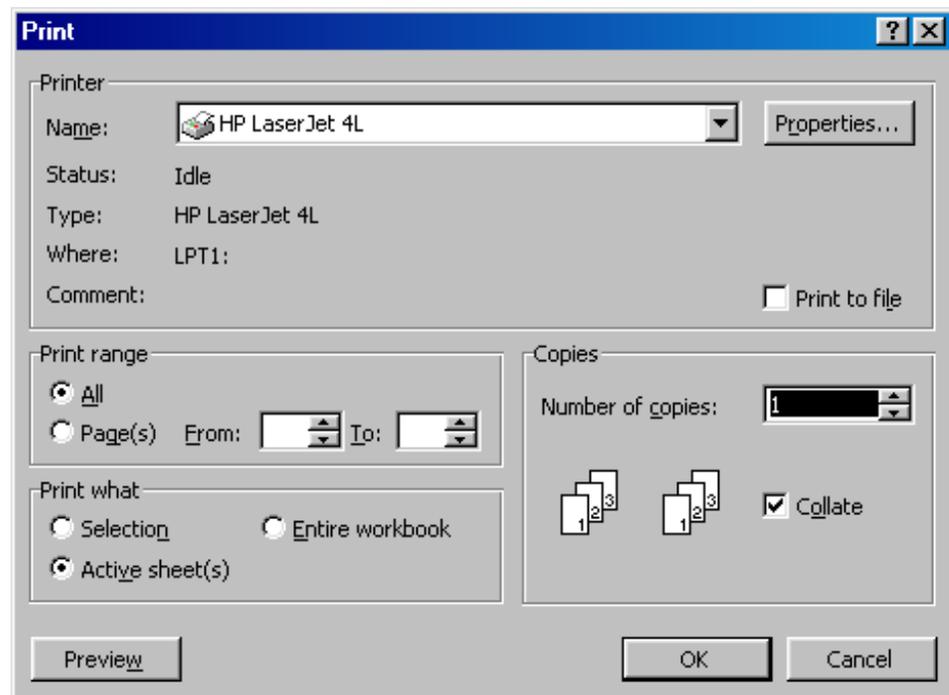
Option Button	Function
	Displays the next page.
	Displays the previous page.
	Switches between a full-page view of a sheet and a magnified view. The Zoom feature does not affect printing size. You can also switch between a full-page view and a magnified view of a sheet by clicking any area of the sheet.
	Displays the Print dialog box.
	Displays the Page Setup dialog box.
	Turns on or off the handles for the page margins, header and footer margins, and column width.
	Switches to page break preview, which allows you to adjust the page breaks on the active worksheet. You can also resize the print area and edit the worksheet. To return to a normal view of your worksheet, from the View menu, choose Normal .
	Closes the Preview window and displays the active worksheet.
	Displays the Preview Help window.

Printing Workbooks

Excel by default will print all the data on the sheet from the upper left-hand corner of where data begins to the lower right-hand corner where it ends. If necessary, you can also specify a default print area for the selected worksheet. Excel will retain the print settings for each sheet in the workbook. You can send the current worksheet to the printer quickly by using the **Print** button. If you want to print a section of a worksheet or the entire workbook, you need to use the Print dialog box.

You can print the same selected area from multiple pages. For example, you can print a block consisting of cells A1 through B10 on the first worksheet and continue to print that same block from the second, third, and fifth worksheets. Three-dimensional and non-continuous print ranges will always print on separate pages.

The **Print** dialog box is shown below:



Printing Options

Feature	Function
Print Range: All	Prints the entire range of data on the selected sheet(s).
Print Range: Page(s)	Prints the designated range of pages on the selected sheet(s).
Print What: Selection	Prints only the selected cells.
Print What: Active sheet(s)	Prints only the selected sheets.
Print What: Entire workbook	Prints the entire workbook.
Number of Copies	Specifies how many copies of the data will be printed.
Collate	Determines the page order when multiple copies are printed. When this option is turned on, the entire table prints before printing the second copy.
Preview	Used to activate Print Preview mode.

How to Print a Worksheet

- Step 1. Select the worksheet(s) you wish to print.
- Step 2. From the **Standard** toolbar, choose the **Print** button.



This method will print all the data on the worksheet unless a designated print area has been set for the worksheet.



If you select multiple worksheets, each worksheet will start on a new page.

How to Print a Selected Range

- Step 1. Select the range to print.
- Step 2. From the **File** menu, select **Print**.
- Step 3. From the **Print** dialog box, choose the **Selection** radio button.
- Step 4. Select **OK**.

How to Select Three-Dimensional Ranges for Printing

- Step 1. Select the cell(s) to create the block.
- Step 2. Press and hold the *Ctrl* key.
- Step 3. With the *Ctrl* key depressed, click on the sheet tab(s) to be included in the three-dimensional reference.
- Step 4. From the **File** menu, choose **Print**.
- Step 5. From the **Print** dialog box, choose **Selection**.
- Step 6. Choose **OK**.



Each range in the three-dimensional block will print on a separate page.

How to Designate a Default Print Range

- Step 1. Select the range to print.
- Step 2. From the **File** menu, select **Print Area** and choose **Set Print Area**.

How to Clear a Default Print Range

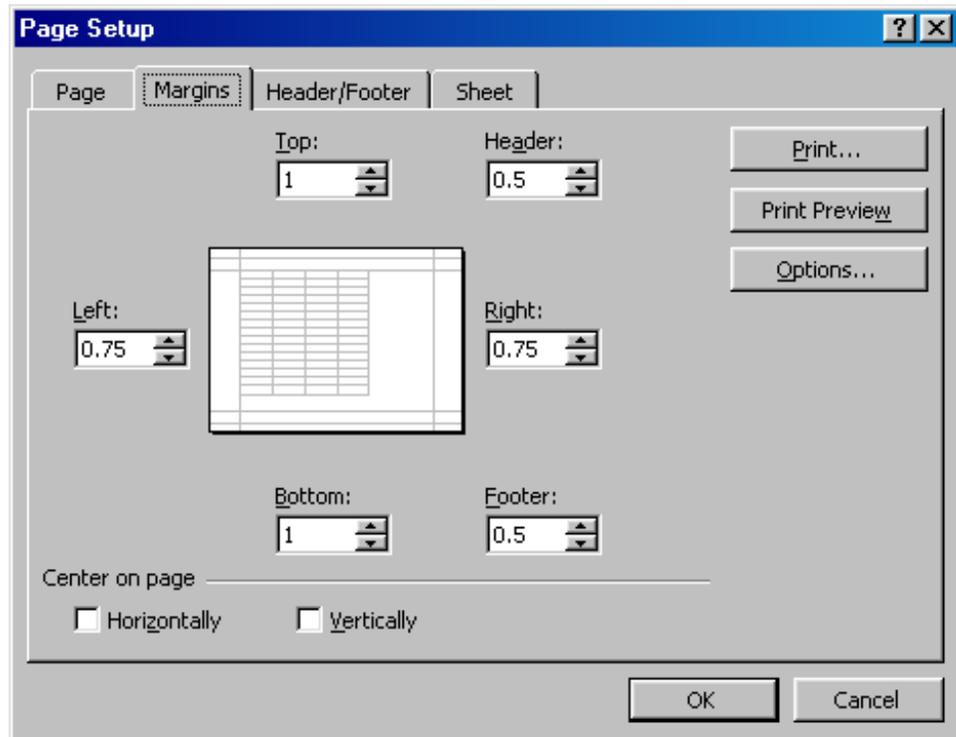
- Step 1. From the **File** menu, select **Print Area** and choose **Clear Print Area**.

How to Center a Table on the Page

Step 1. Select the worksheet or range to print.

Step 2. From the **Page Setup** dialog box, select the **Margins** tab.

The following dialog box will appear:



Step 3. In the **Center on page** area, choose the appropriate options.

Step 4. Choose **OK**.

Inserting and Deleting Page Breaks

Excel automatically inserts page breaks into your workbook file on the basis of the page layout; however, you can choose to manually insert page breaks. Excel workbooks will not display the system page breaks until the sheet has been printed or previewed.

How to Insert a Vertical Page Break

Step 1. From the active worksheet choose the column to the right of where you want to add a vertical page break.

Step 2. From the **Insert** menu, choose **Page Break**.

How to Insert a Horizontal Page Break

Step 1. From the active worksheet choose the row below where you want to add a horizontal page break.

Step 2. From the **Insert** menu, choose **Page Break**.

How to Insert a Vertical and Horizontal Page Break

Step 1. From the active worksheet choose the cell below and to the right of where you want to add the page break.

Step 2. From the **Insert** menu, choose **Page Break**.



Soft or system page breaks display as thin dashed lines. Hard page breaks display as thick dashed lines.

How to Remove a Horizontal Page Break

Step 1. Select a cell below the horizontal page break.

Step 2. From the **Insert** menu, choose **Remove page break**.

How to Remove a Vertical Page Break

- Step 1. Select a cell to the right of the vertical page break.
- Step 2. From the **Insert** menu, choose **Remove page break**.

How to Remove All Page Breaks

- Step 1. From the **View** menu, choose **Page break preview**.
- Step 2. Right-click on any cell and from the shortcut menu, choose **Reset all page breaks**.



You can also remove any page break in page break preview by dragging the page break outside of the print area.

Manipulating Worksheets

In this lesson, you will learn the skills necessary to:

- ✓ *Name a worksheet.*
- ✓ *Insert or delete a worksheet.*
- ✓ *Copy or move a worksheet.*
- ✓ *Freeze and unfreeze panes on a worksheet.*

Naming Worksheets

By default, a workbook has three worksheets, each with a tab at the bottom of the workbook window. Worksheets have default names consisting of the generic name “Sheet,” which is numbered consecutively. You can add more descriptive names to the workbook worksheets to make it easier to identify the contents of each worksheet.

Guidelines for Naming a Worksheet

- Can contain up to 31 characters in uppercase and lowercase.
- Must start with a character. Do not start a name with a blank space.
- Can contain letters, numbers, spaces, ~, `!, %, _ , |, \, ‘, and ?.
- Cannot contain the following characters: , ; . + - * / > < @ # or &.
- Should not be the same as a function name or a key name.
- Should not look like a worksheet letter or cell address.
- A name cannot be duplicated in the same workbook.

How to Name Worksheets

- Step 1. Double-click on the sheet tab.
- Step 2. Type the name for the worksheet.
- Step 3. Press ***Enter***.

Inserting and Deleting Worksheets

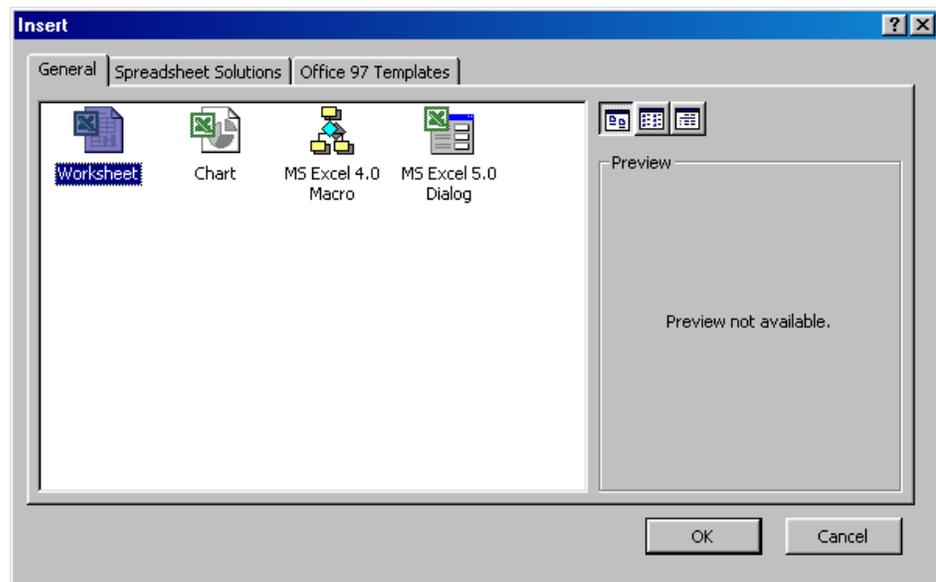
You can insert new worksheets between existing ones. You can also delete worksheets. Deleting a worksheet permanently removes the worksheet from the workbook, and erases any data on that worksheet.

How to Insert a Worksheet

- Step 1. Select the worksheet position where you would like the new worksheet inserted.
- Step 2. While pointing to the sheet tab, right-click and select **Insert**. From the **Insert** dialog box, select **Worksheet**, and choose **OK**

or

From the **Insert** menu, select **Worksheet**.



The inserted worksheet will be placed in front of the worksheet from which you began the insert command. The newly inserted worksheet automatically becomes the active or selected worksheet.



Using the Insert, Worksheet menu command bypasses the Insert dialog box.

How to Delete a Worksheet

- Step 1. Select the worksheet.
- Step 2. Right-click and from the shortcut menu select **Delete**
or
From the **Edit** menu, select **Delete Sheet**.
- Step 3. Select **OK** from the confirmation dialog box.

Moving and Copying Worksheets

You can move worksheets within a workbook using the **Click and Drag** feature or the **Edit** menu. Moving worksheets makes it easy to rearrange the order of the worksheets without deleting a worksheet and inserting a new one in another place.

How to Move Worksheets with the Mouse

- Step 1. Select the tab of the worksheet you want to move.
- Step 2. Hold down the left mouse button and drag the sheet tab to its new location.
- Step 3. Release the left mouse button at the new position. The worksheet will be inserted immediately before that position.

How to Copy Worksheets with the Mouse

- Step 1. Select the tab of the worksheet you want to copy.
- Step 2. Press and hold the **Ctrl** key.
- Step 3. While holding the **Ctrl** key, press and hold down the left mouse button and drag the sheet tab to its new location.
- Step 4. Release the left mouse button at the new position and then release the **Ctrl** key. The worksheet will be inserted immediately before that position.

Creating Panes on a Worksheet

A pane is a region of a worksheet that remains fixed while you scroll. You can define a pane vertically as columns, horizontally as rows, or as a combination of specific rows and columns in order to always have column and row headings in view.

Panes are useful when working with large worksheets as you can keep column or row headings visible while you scroll.

How to Create a Pane

Step 1. Select the row, columns, or cell required to define the pane. The following table outlines the selection method for each pane type.

Pane Type	Method of Selection
Row	Select the row immediately below the row you wish to remain fixed.
Column	Select the column immediately to the right of the column you wish to remain fixed.
Combination of rows and columns	Select the cell to the immediate left and below the row and column intersection where you want the pane boundary to appear.

Step 2. From the **Window** menu, choose **Freeze Pane**.



Panes are saved with the workbook. To remove or redefine a frozen pane, you must first remove it.

How to Remove a Pane

Step 1. Move to the worksheet that contains the pane.

Step 2. From the **Window** menu, choose **Unfreeze Pane**.

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