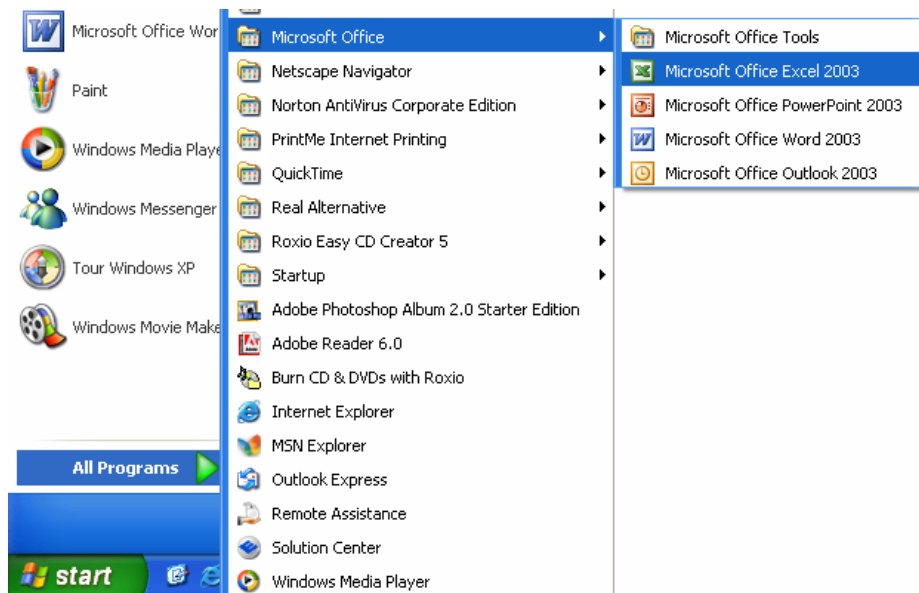


## Microsoft Excel 2003

Microsoft Excel is an electronic spreadsheet program. Electronic spreadsheet applications allow you to type, edit, and print spreadsheets. Excel can be used for financial, statistical, or list information.

### Opening the Excel Application

- Click on the **Start** button.
- Click on **All Programs**.
- Select **Microsoft Office**.
- Select **Microsoft Excel**.



**OR**

- If there is a shortcut on the desktop, then double-click on the **Excel** icon.



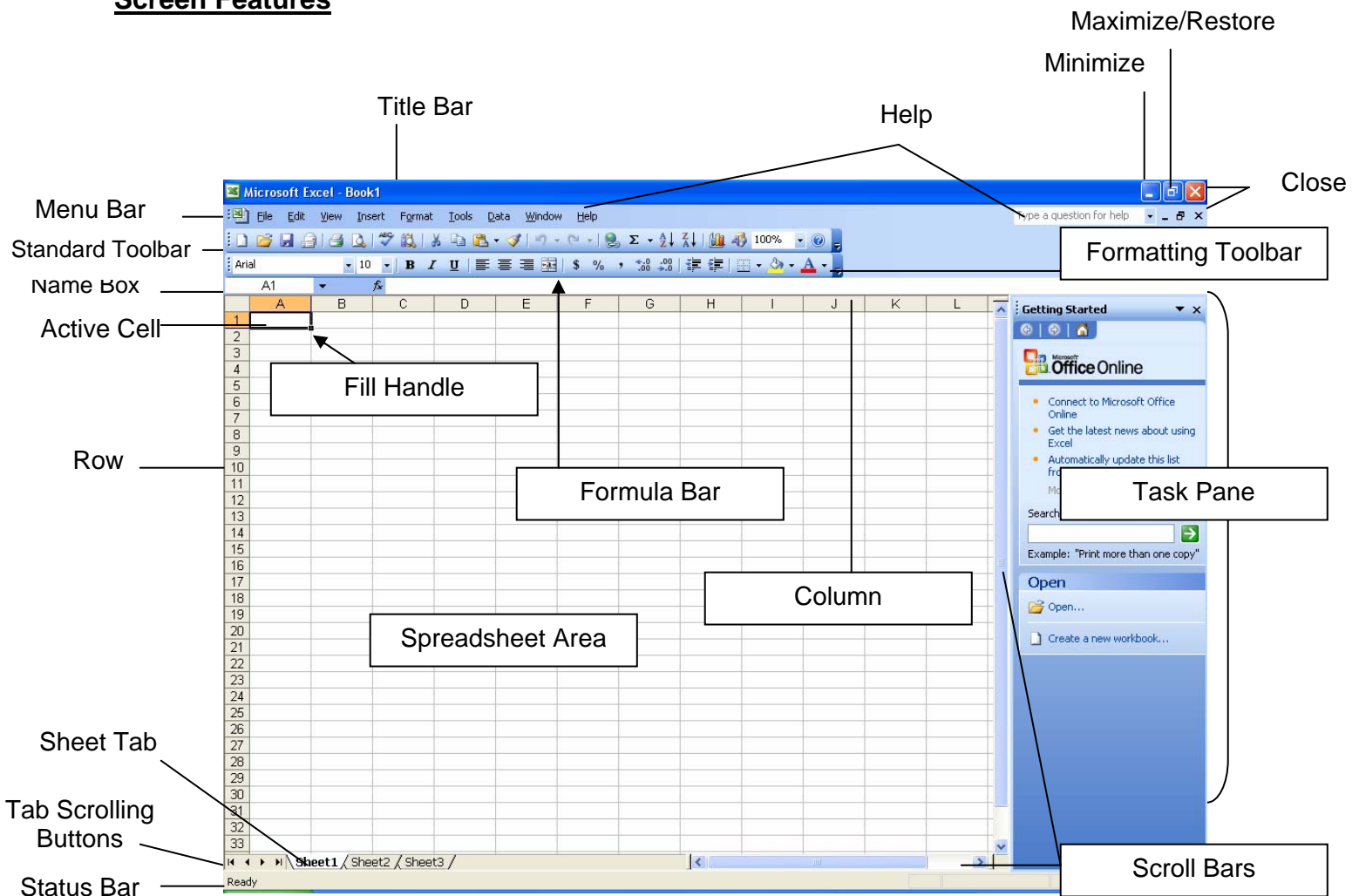
## Definitions

**Spreadsheet application** - An electronic spreadsheet program, such as Microsoft Excel, that consists of a large grid of columns and rows. The intersection of the columns and rows are cells. Data is placed within these cells.








**Workbook** - A file in a spreadsheet program.

**Worksheet** - A smaller section of a workbook file designated by sheet tabs. Worksheets can have multiple pages.

## Screen Features



## Mouse Pointers in Excel

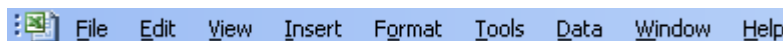
Shape	Implication	Action
	The default pointer shape.	Moves cell pointer or selects a range of cells
	Appears when the pointer is on a border (column, row, or window). When adjusting row height, the arrows point up and down. When adjusting column width, the arrows point right to left.	Adjusts the column width, row height, or window size
	Appears when you are editing the contents of a cell.	Moves the insertion point within the cell
Windows:  Macintosh: 	Appears when you have a graphic that may be moved.	Moves the selected graphic to the new location.
	Appears when you are pointing to the border of a cell.	Moves the selected cell to a new location
	Appears when you are at the "fill corner" of a cell or range of cells.	AutoFills other cells with similar information

## Title Bar



The bar at the top of the screen that states the file name of the workbook that you have open and may also state the program you are using. If you have not saved and named your file yet, Excel will assign a filename such as Book1 or Book2 (increasing in number as you create new workbooks). Located on the right of this bar are the minimize, restore/maximize, and close buttons. These affect the Excel application; while the lower set of buttons affects the workbook file that you are working on.

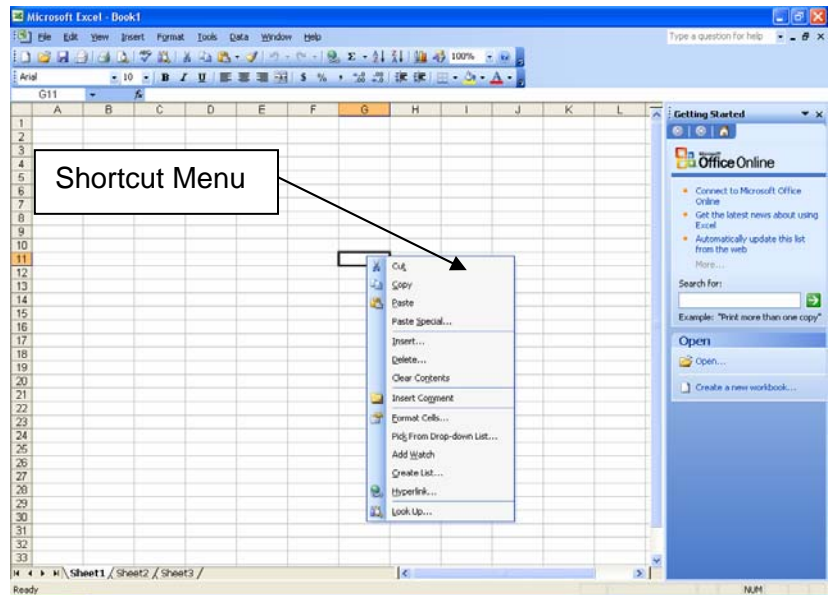
## Menu Bar



The menu bar shows you the various menus that you can access in Excel. Each menu contains a list of different commands.

## Shortcut Menu

Shortcut menus are a quicker way to access some of the commands also found in menus. To open a shortcut menu, point the mouse symbol at something on the Excel screen and right-click (press the right mouse button). A shortcut menu will appear related to the object you pointed to (context-sensitive menu). Select a command within the shortcut menu. To make the shortcut menu go away because you have changed your mind or accidentally right-clicked, click the left mouse button on an empty area of the screen or press the **Esc** (Escape) key.

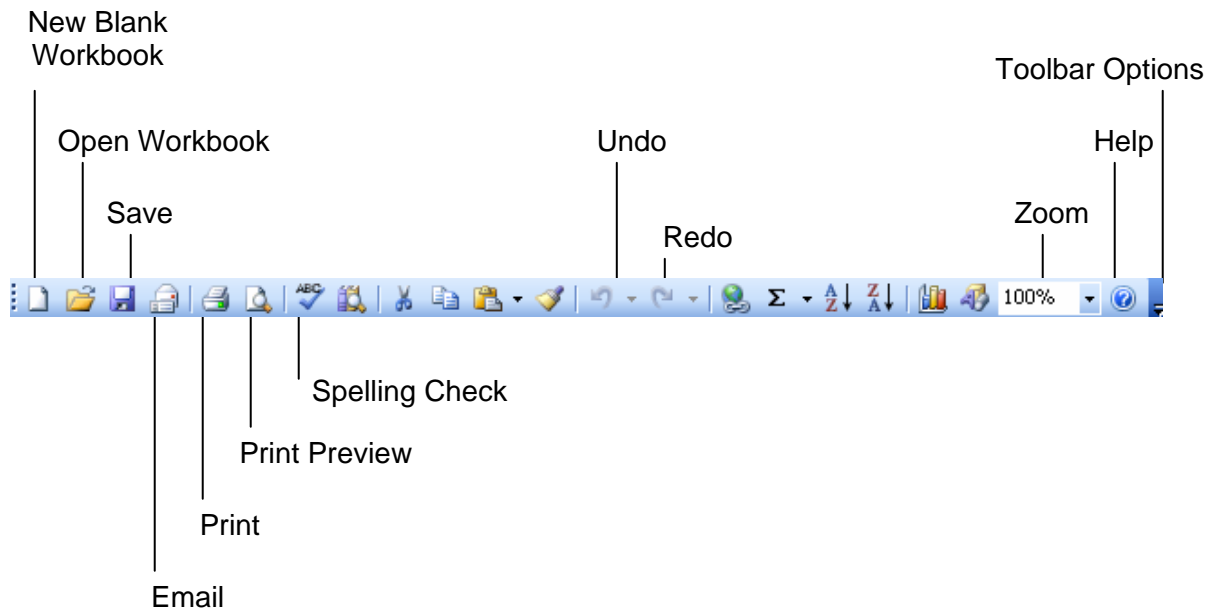


## Toolbars

A toolbar is a bar that contains shortcut buttons. When a button is clicked an action will be performed. If you do not know what a button does, then you can point to it and pause. A screen tip with the name of the button will appear. If you click the arrow at the end of the toolbar, then additional buttons may appear for your use.

### **Standard Toolbar**

This toolbar has various shortcut options. These commands are some of the basic or common functions that will be used in Excel. Refer to the toolbar below when needed. The functions will be covered in various sections of this handout and other computer classes.

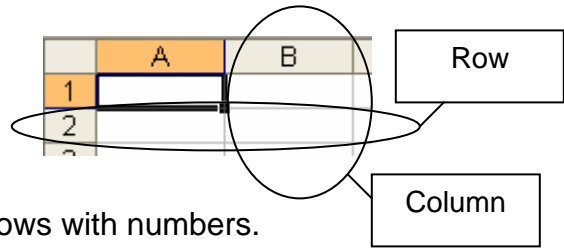


### ***Toolbar Tips:***

- Some toolbars will be viewed as floating toolbars (floating over the screen). To move the toolbar, click, hold, & drag the title bar of the toolbar to move the toolbar to a new location.
- A dim or light button is unable to be used (inactive button). A highlighted button means that the button is selected or currently being used.

## Row

The name assigned to each line/grouping of horizontal cells in a spreadsheet. Excel labels the rows with numbers. There are 65,536 rows in an Excel worksheet.

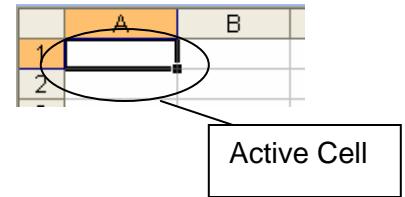


## Column

The name assigned to each line/grouping of vertical cells in a spreadsheet. Excel labels the columns with letters. There are 256 columns in an Excel worksheet.

## Cell

A cell is the intersection of a row and column. Each cell has a unique cell address consisting of the column letter and row number.



### **Active Cell**

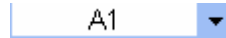
The active cell is the cell that is currently selected. The selected cell will have an outline surrounding the cell and in the lower right corner there will be a small box (fill handle). The active cell is where data will be inputted when a user is typing.



## Fill Handle

A special box found in the lower right corner of the active cell or selected area. The fill handle can be used as a shortcut for completing list information. The AutoFill will complete custom lists that are stored in the Excel application.

## Name Box



The name box shows the cell address for the active cell. As a user selects areas of the workbook the quantity of rows and columns will be displayed in the name box. A user may decide to name areas of the spreadsheet. The name box can be used to quickly name and then select areas of a worksheet.

## Formula Bar



The formula bar shows what is contained within the active cell. Sometimes you may not be able to see everything in the active cell; however the formula bar will display the entire contents of the cell. Formulas are also displayed in the Formula Bar. Formulas are mathematical equations used to compute something within the worksheet. Formulas will display in the formula bar, while the answer to the formula will display in the cell.

## Sheet Tabs



Labels at the bottom of the workbook to designate the worksheets contained within the workbook. The sheet tabs look similar to file folder tabs. The workbook starts with three worksheets but more worksheets can be added. The worksheets can also be moved and renamed. The active worksheet will be a lighter color than the inactive worksheets.

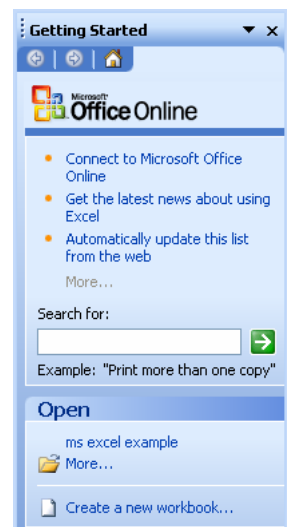
## Tab Scrolling buttons



These buttons are used to move to different worksheets contained within the workbook.

## Task Pane

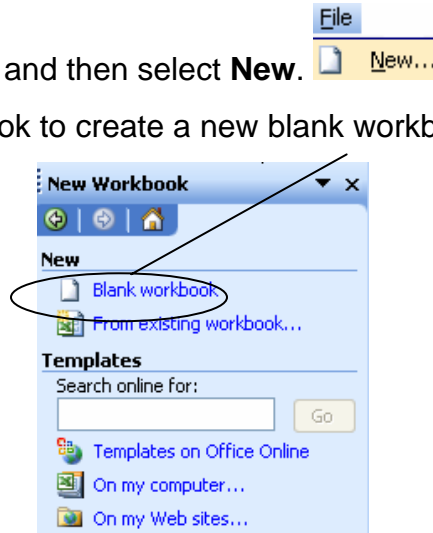
A help area to the right of the screen that appears and disappears as needed. This area is available to assist you in using Excel. To view the task pane, open the **View** menu and select **Task Pane** (or **Ctrl+F1**). **Note:** This is new to Excel 2003 and is present in other Office 2003 programs.



## Creating a Workbook File

When you open Excel a blank workbook will also open. To create another workbook, use the following instructions:

- Click on the **File** menu and then select **New**.
- Click on Blank Workbook to create a new blank workbook.

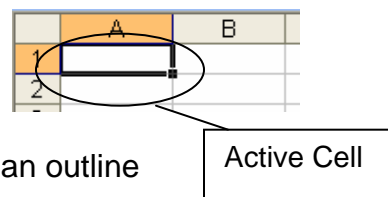


OR

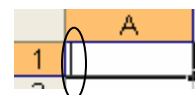
- Click on the **New**  **button** on the **Standard toolbar**.

## Entering Data

Click in the cell that you would like to make active. When you open Excel, the active cell will be A1. The active cell has an outline surrounding it and a small black box in the lower right corner (fill handle). When you begin typing the data will appear in the active cell. Each cell has a unique cell address that consists of the column letter and the row number. Notice that the column letter and row number are highlighted to show what the cell address is for the active cell.



When you begin typing the cursor will appear. What you type will appear before the cursor. To create more space in a cell use the **Spacebar**. Use the **Enter** key to move down the spreadsheet while the data is being accepted into the cell. Use the **Tab** key to move across the spreadsheet while the data is being accepted into the cell. If you decide that you do not want the data to be accepted in the cell, then press the **Esc** key.



You can move throughout the workbook using the mouse to click or the arrow keys on the keyboard. Also the scroll bars will let you view different areas of the workbook.

To edit what is in a cell, double click in the cell or use the **F2** key on the keyboard. A cursor will appear and you can make changes using the arrow keys to move the cursor, the delete or backspace keys to erase, or just begin typing.

## Moving the Active Cell

### Mouse

Point the mouse symbol on the screen to the area you want to move the active cell to and press the left mouse button (click).


### Keyboard

- **Enter** - Moves the active cell down one cell and accepts that data entered into the cell.
- **Tab** - Moves the active cell right one cell and accepts that data entered into the cell.
- **Left or Right Arrow** - Moves the active cell one cell at a time, left or right.
- **Up or Down Arrow Keys** – Moves the active cell one cell at a time, up or down.
- **Ctrl + Left or Right Arrow Keys** - Moves the active cell left or right to the beginning or end of an area that contains data. If no data is in a cell then it goes to the first or last column of the worksheet.
- **Ctrl + Up or Down Arrow Keys** - Moves the active cell up or down to the beginning or end of an area that contains data. If no data is in a cell then it goes to the first or last row of the worksheet.
- **Page Down** - Moves the active cell down to the next page of the worksheet.
- **Page Up** - Moves the active cell up to the previous page of the worksheet.
- **Alt + Page Down** - Moves the active cell right to the next page of the worksheet.
- **Alt + Page Up** - Moves the active cell left to the previous page of the worksheet.
- **Ctrl + Page Down** - Makes the next worksheet active (right).
- **Ctrl + Page Up** - Makes the previous worksheet active (left).
- **Home** - Moves the active cell to column A.
- **Ctrl + Home** - Moves the active cell to cell A1.

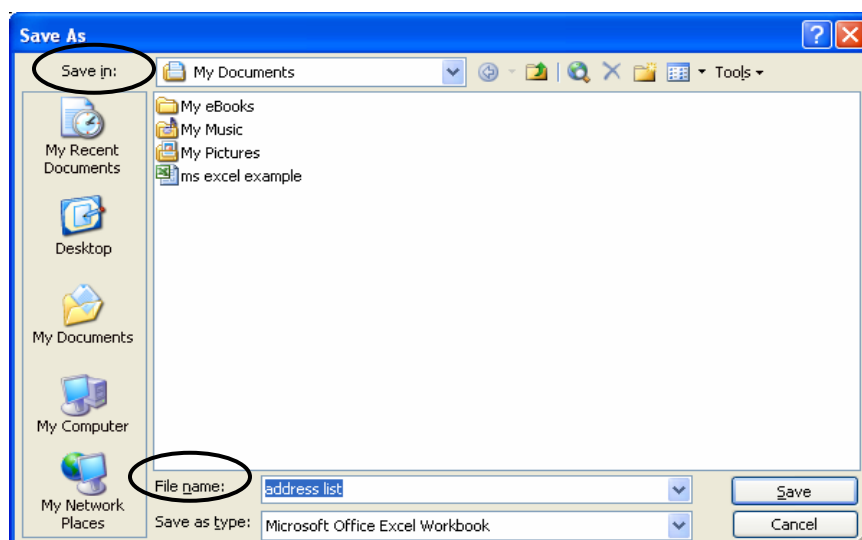
## Saving the Workbook

Decide where you would like to save the workbook. On most public library computers, workbooks will have to be saved to a 3 ½ floppy disk. It is recommended that you save your work often. Periodically save the file as you are typing to ensure that you do not lose your file (information) if the computer malfunctions.

## Saving to Your Computer

- Click on the **File** menu and then click the **Save** option
- For a shortcut click the **Save**  **button** on the Standard Toolbar.

**Note:** The **Save As** dialog box will appear the **first time** you save your file (even though you clicked **Save**). This dialog box allows you to type a file name and select a file location (Saved in). When you save the changes you made to the file and select **File-Save** again, you will not need to name your file or choose a location again.




- Click on **My Documents** to save the file to the computer. My Documents is a folder located on the computer's hard disk drive. This folder allows you to keep your files organized and separate from files that run the computer.
- Type a name for the file- Click in the box next to **File name:** and type a file name for the workbook.
- Click the **Save** button.

## Saving to a Disk

- Choose where to save the file. Click the down arrow (or upside down triangle) in the **Save in:** area and select a location. This step needs to be done if the location is not already selected in the Save in area.
- Click on a disk drive from the drop-down list such as **3<sup>1</sup>/<sub>2</sub> floppy, Removable Storage, CD.**
- Click the **Save** button.

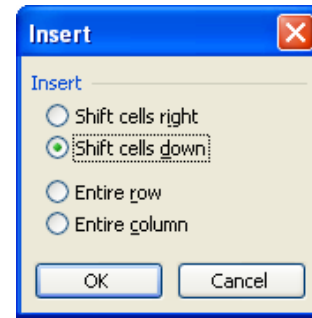
## Saving Updates to a Workbook

To save the changes you made to the workbook, click the **Save**  button or open the **File** menu and select **Save**.

## Adjusting Data

### Inserting

- Move the active cell to the location where you want to insert something.
- Open the **Insert** menu and select what you would like to insert (cell, row, column, or worksheet).
- Whatever you insert will appear above or to the left of the active cell.



### Deleting

- Select what you would like to delete.
- Open the **Edit** menu and select **Delete**.
- Select how you want the cells shifted by clicking in the radio button and then clicking **OK**.

## Resizing Rows & Columns

### Rows

- Open the **Format** menu.
- Select **Row** and **Height**.
- Type a row height and click **OK** or press **Enter**

### OR

- Place the mouse between the row numbers. (The white cross will become a black line with arrows pointing up and down)
- **Click, hold, & drag** the mouse up or down to resize the row. (or when the symbol is present).



- **Double-click** and Excel will resize the row for you.

### Columns

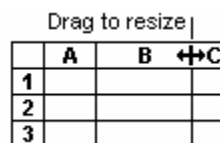
- Open the **Format** menu.
- Select **Column** and **Width**.
- Type a column width and click **OK** or press **Enter**.

### OR

- Place the mouse between the column letters (The white cross will become a black line with arrows pointing left and right)
- **Click, hold, & drag** the mouse left or right to resize the row

### OR

- When the symbol is present, **double-click** and Excel will resize the column for you.



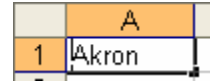
## Editing Text

### **Edit Mode**

- To edit data in a cell, double-click within the cell or press the **F2** key.

### **Delete key**

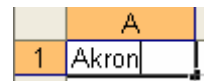
- Move the cursor to the left of text. Each time you press the **Delete** key one character to the right of the cursor is erased.



	A
1	Akron

### **Backspace key**

- Move the cursor to the right of text. Each time you press the **Backspace** key one character to the left of the cursor is erased.



	A
1	Akron

### **Insert key**

- Move the cursor to the left of the text that you would like to replace.
- Press the **Insert** key to go into **Overtyp** mode. This mode allows you to type over the existing text.
- Press the **Insert** key again to leave overtype mode.

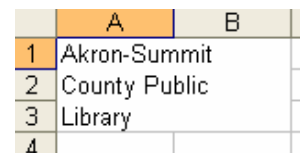


	A
1	Akron

OVR

## Line Break

When you reach the end of the cell and you want to force the cursor to create another line within the same cell use the keystroke combination **Alt+Enter**.

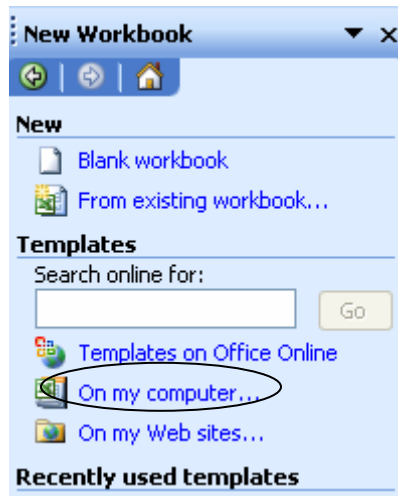


	A	B
1	Akron-Summit	
2	County Public	
3	Library	
4		

## Other Types of Workbooks

In addition to Blank Workbooks, Microsoft Excel has other types of workbooks available. There are Workbook Examples (a.k.a. Templates) to assist in creating workbooks.

- Open the **File** menu and then select **New**.
- Click **On my computer...** from the Task Pane on the right side of the screen.
- In the Templates dialog box, click a tab to see the types of workbooks that you can create. *Example:* A **Balance Sheet** template can be found in the **Spreadsheet Solutions** tab.



- Click on the icon for the type of workbook that you would like to create and then click the **OK** button.

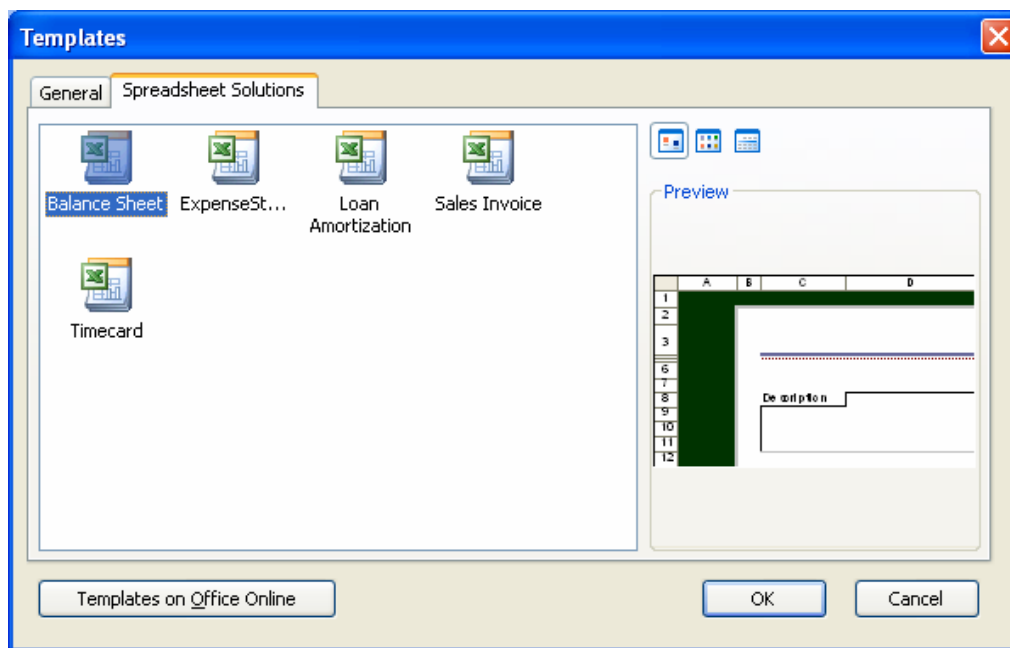
**OR**

- Double-click on the icon.

*Example:* **Balance Sheet**



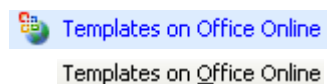
The **Spreadsheet Solutions** tab will give you the option to select Workbook Examples (a.k.a. Templates) to assist in creating workbooks. The **General** tab contains the Blank Workbook option.



Workbook templates are workbook files that are already setup with information and a layout. You can then input your own specific information.

### **More Templates**

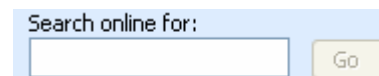
Additional Microsoft Templates are available online. The computer you are working on will need to have both Microsoft Excel and Internet access.



- Click the **Templates on Office Online** link from the Task Pane or the Templates dialog box. **OR** Search online for templates by using the search box located in the Task Pane.

- To go directly to the site use this web address:

<http://office.microsoft.com/templates/>



Follow the instructions to download templates. Note that some templates are protected from changes. To remove protection go to **Tools > Protection >** and select **Unprotect Workbook**.

## Existing Files

Files can be created from existing saved files. This allows new files to be created from old files without having to start from a blank workbook.

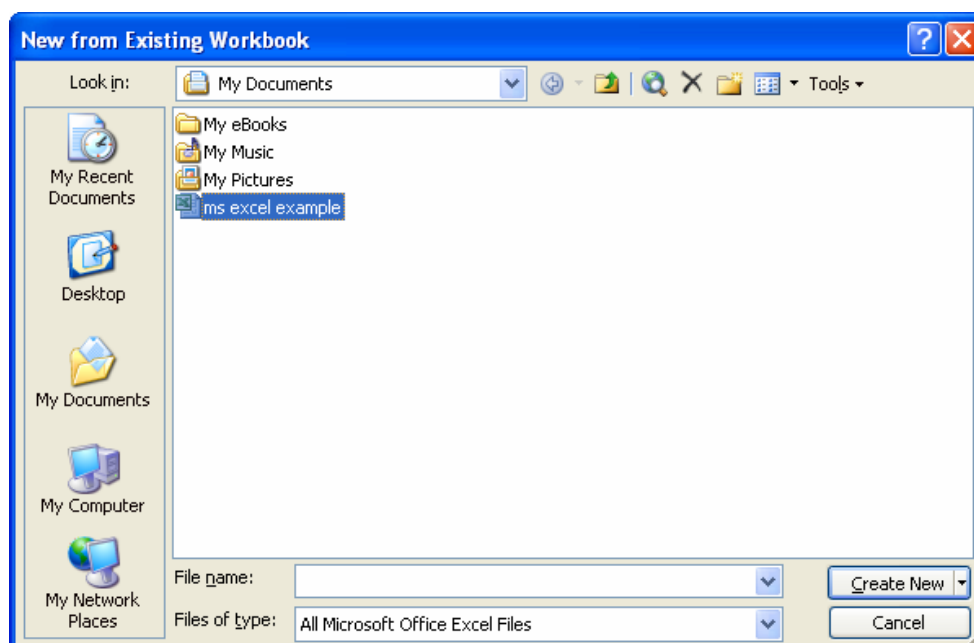
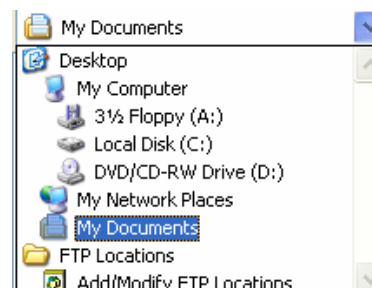
*To use this Microsoft feature:*

- Click on the **File** menu and then select **New**.
- Click **From existing workbook...** from the Task Pane on the right side of the



screen.












- Select the location where the existing file is saved.
- Select the saved file that you would like to create a new file from.
- Click the **Create New** button.














## Common Windows Commands

This is a list of commands that you may find in many Microsoft software products (Word, Excel, Access, PowerPoint, FrontPage, and Internet Explorer). Not all of the commands are applicable to all products.

You can always click the right mouse button anywhere on the window to display a short menu of commands. The commands listed will vary depending on where on the window you click the mouse.

Command	Menu	Keyboard	Toolbar Shortcut
Help	Help	F1	
Activate Menus	click mouse on menu	Alt or F10	
New (blank document)	File>New	Ctrl+N	
Open (a file or folder)	File>Open	Ctrl+O	
Close (a window)	File>Close	Alt+F4 Excel: Exits Excel program.	
Save	File>Save	Ctrl+S	
Save As	File>Save As	F12	
Print Preview	File>Print Preview	Ctrl+F2	
Print	File>Print	Ctrl+P	
Select All	Edit>Select All	Ctrl+A	
Copy	Edit>Copy	Ctrl+C	
Cut	Edit>Cut	Ctrl+X	
Paste	Edit>Paste	Ctrl+V	
Cancel (last action)		Esc	
Bold	Format>Font	Ctrl+B	

Command	Menu	Keyboard	Toolbar Shortcut
	Excel: Format>Cell>Font		
Italics	Format>Font Excel: Format>Cell>Font	Ctrl+I	
Underline	Format>Font Excel: Format>Cell>Font	Ctrl+U	
Undo (last action)	Edit>Undo	Ctrl+Z	
Redo (last action)	Edit>Redo	Ctrl+Y	
Restore (window size)		Alt+Spacebar+R	
Maximize (window size)		Alt+Spacebar+X	
Find	Edit>Find	Ctrl+F	
Replace	Edit>Replace	Ctrl+H	
Center	Format>Paragraph Excel: Format>Cell>Alignment	Ctrl+E	
Left align	Format>Paragraph Excel: Format>Cell>Alignment	Ctrl+L	
Right align	Format>Paragraph Excel: Format>Cell>Alignment	Ctrl+R	
Justify	Format>Paragraph Excel: Format>Cell>Alignment	Ctrl+J	

## Exercises

### Exercise 1

#### Creating a Workbook

1. Create a new blank workbook.
2. Organize an address list. Make sure each part of the address is in a different column.

Example:

	A	B	C	D	E	F	G	H
1	First Name	Last Name	Address	Address 1	City	State	Zip	Country
2	Marissa	Smith	2315 Oak St	Apt A	Akron	OH	44305	USA
3	Jonathan	Bronson	987 Fairland Ave		Clinton	OH	44216	USA
4	MJ	Johnson	5673 1st St		Barberton	OH	44203	USA

### Exercise 2

#### Saving a Workbook

1. Save the workbook from Exercise 1 to a 3 ½ floppy disk with the filename “Exercise One”.

### Exercise 3

#### Working with Columns

1. In the workbook named Exercise 1, **resize** the columns so that all of the data is visible in the columns.
2. **Delete** the “Country” column from the workbook. If your file does not have this column, use another column.
3. **Insert** a column before First Name. In the header row place the heading “Company Name” for this new column.

**Challenge:** Do not resize this column. Instead create a **Line Break** after “Company” and then type “Name”.

4. **Save the changes** made to the workbook. (**Remember:** You are saving the updates the computer should not ask you for a filename.)