

Task Force on Technology

EXCEL

Basic terminology

Spreadsheet—A spreadsheet is an electronic document that stores various types of data. There are vertical columns and horizontal rows. A cell is where the column and row intersect. A cell can contain data and can be used in calculations of data within the spreadsheet. An Excel spreadsheet can contain workbooks and worksheets.

Workbook— The workbook is the holder for related worksheets.

Worksheet—Most of the Excel screen is devoted to the display of the worksheet in use. The worksheet consists of grids and columns. The intersection of a row and column is a rectangular area called a **cell**.

Cells —The worksheet is made up of cells. There is a cell at the intersection of each row and column. A cell can contain a value, a formula, or a text entry. A text entry is used to label or explain the contents of the workbook.

Rows, Columns, and Sheets —The Excel worksheet contains 16,384 rows that extend down the worksheet, numbered 1 through 16,384.

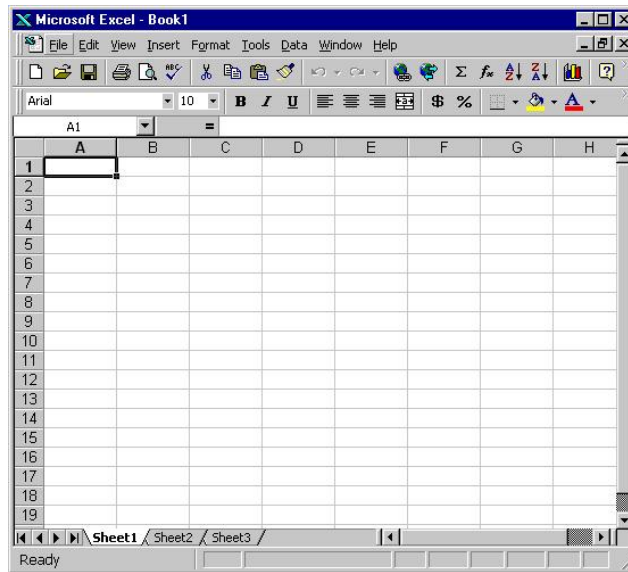
The Excel worksheet contains 256 columns that extend across the worksheet, lettered A through Z, AA through AZ, BA through BZ, and continuing to IA through IZ.

The Excel worksheet can contain as many as 256 sheets, labeled Sheet1 through Sheet256. The initial number of sheets in a workbook, which can be changed by the user is 16.

Cell References—**Cell references** are the combination of column letter and row number. For example, the upper-left cell of a worksheet is A1.

Excel 2002 process (Windows XP OS)

The Excel Window



Opening Excel 2002

- Left double click on the **Excel** icon on your **Desktop**



or

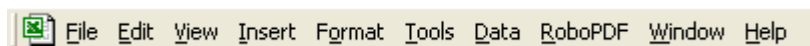
- Left click on **Start** → **Programs** → **Microsoft Excel**

Exploring the Excel Interface

When you first open Microsoft Excel, the window displays a new, blank worksheet, in which you can enter, format, and analyze data using the various commands available in the menu bar. Toolbars provide easy access to common commands, as do shortcut menus, which you access by right-clicking the cells in the worksheet

Menu Options

The Microsoft Excel menu bar contains all the commands required to create, work with, print, and save workbooks. To access these commands, click the name of the menu to open it, and then click the command you want to access.



Each menu groups together related commands, sometimes using submenus to further group commands:

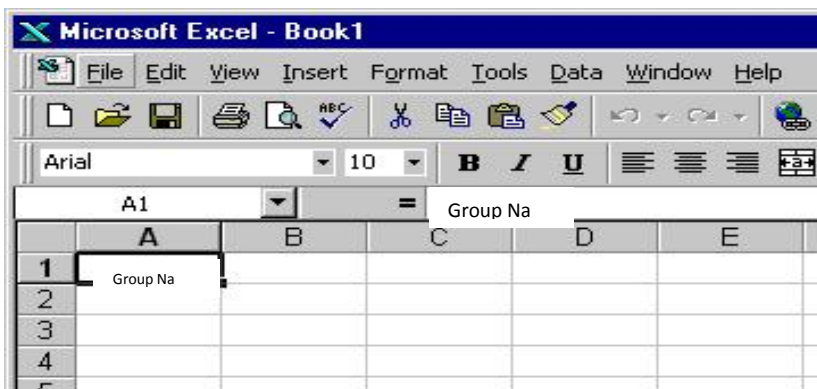
- **File**— Create, open, save, print, and close workbooks.
- **Edit**— Perform editing functions on your workbook, including copying, cutting, and pasting data and objects, moving to various locations in a workbook, and undoing and redoing actions.
- **View**— Change the workbook's display size and style.
- **Insert**— Insert new worksheets, or additional space, such as new cells, columns, or rows; also insert charts, comments, functions, hyperlinks and other objects into your workbooks.
- **Format**— Apply formatting to worksheets and their contents.
- **Tools**— Use Excel's tools, such as the spell and grammar checker, macro recorder, and protection and collaboration features, and set your Microsoft Excel preferences.
- **Data**— Sort, filter, and otherwise arrange the data on your worksheets.
- **Window** —Switch between open workbook windows, or split the window of the current workbook.
- **Help**— Access Microsoft Excel's on-line help.

To Create an Excel XP Workbook:

- Choose **File** → **New** from the menu bar.
- The **New Workbook** task pane opens on the right side of the screen.
- Choose **Blank Workbook** under the **New** category heading.
- A blank workbook opens in the Excel window. The **New Workbook** task pane is closed.

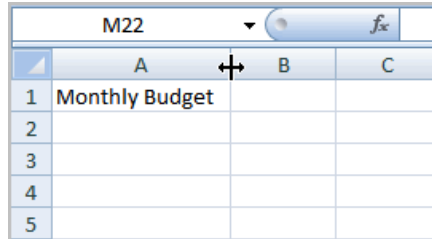
To Enter Data into a Cell:

- The data can be typed in either the cell or the Formula bar.
- Data being typed appears in both the **active cell** and in the **formula bar**.



To Modify Column Width:

- Position the **cursor** over the **column line** in the column heading and a **double arrow** will appear.



The screenshot shows an Excel spreadsheet window titled 'M22'. The active cell is in column A, row 1, containing the text 'Monthly Budget'. A double-headed arrow cursor is positioned over the vertical line between column A and column B, indicating that the width of column A is being adjusted. The spreadsheet has columns A, B, and C, and rows 1 through 5.

- Left-click the mouse and **drag** the cursor to the **right** to **increase** the column width or to the **left** to **decrease** the column width.

Sorting data

A selected range of data can be sorted in alphabetical order, reverse alphabetical order, ascending numerical order (smallest to largest) or descending numerical order (largest to smallest).

- Select the range of data you want to sort, remembering to select the entire column.
- Click on **Data > Sort**
- In the sort warning dialog box click on “**Expand the selection**” and the **Sort** button.
- A pop-up screen gives you the choice of indicating which column you want to sort. Also, choose whether you want to sort ascending or descending.
- Click on **OK**
- If your columns have headings, make sure the box is checked so the program will not try to sort the headings along with the data.

To alphabetize the names of the groups within a given district, use the following procedure:

Enter the name of the column and click **Ascending**. Then click on **OK**



Saving a workbook


Every workbook created in Excel must be saved and assigned a name to distinguish it from other workbooks. The first time you save a workbook, Excel will prompt you to assign a name through the **Save As** operation. Once a name is assigned, any additional changes made to the text, numbers or formulas need to be saved using the **Save** operation.

To Save a New Workbook:

- Choose **File** → **Save As** from the menu bar.

To Save Changes Made to an Existing Workbook:

- Choose **File** → **Save** from the menu bar, or

Click the  Save button on the Standard toolbar.

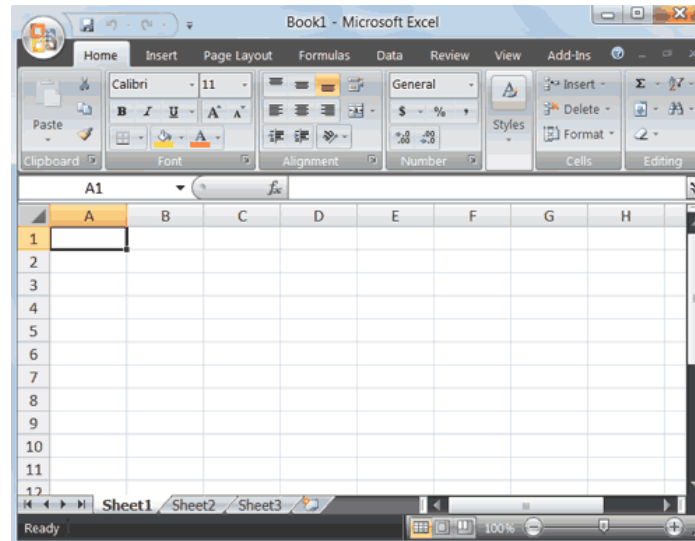
Closing a Workbook

To Close an Existing Excel XP Workbook:

- Choose **File** → **Close** from the menu bar. The workbook in the Excel window is closed.

Excel 2007 process (Vista OS)

The Excel 2007 window



Opening Excel 2007

- Left double click on the **Excel** icon on your **Desktop**.



or

- Left click on **Start** → **All Programs** → **Microsoft Office Excel 2007**

Exploring the Excel 2007 interface

Getting started with Excel 2007, you will notice that there are many similar features to previous versions. You will also notice that there are many new features that you will be able to utilize. You should remember three features as you work within Excel 2007: the Microsoft Office Button, the Quick Access Toolbar, and the Ribbon.

The **Office** button replaces the old File drop-down menu. Click on it to access the Open, New, Save, Print etc. options. This button allows you to create a new workbook, Open an existing workbook, save and save as, print, send, or close.

Quick Access Toolbar—The **quick access toolbar** is a customizable toolbar that contains commands that you may want to use. You can place the quick access toolbar above or below the ribbon.

Ribbons—The Office 2007 interface uses a new feature called the Ribbon. The ribbon is the panel at the top portion of the document. It has seven tabs: Home, Insert, Page Layouts, Formulas, Data, Review, and View. Each tab is divided into groups. This replaces the old drop-down menus by grouping common tasks together under category tabs. Click on a tab to access these common functions.

- **Home:** Clipboard, Fonts, Alignment, Number, Styles, Cells, Editing
- **Insert:** Tables, Illustrations, Charts, Links, Text
- **Page Layouts:** Themes, Page Setup, Scale to Fit, Sheet Options, Arrange
- **Formulas:** Function Library, Defined Names, Formula Auditing, Calculation
- **Data:** Get External Data, Connections, Sort & Filter, Data Tools, Outline
- **Review:** Proofing, Comments, Changes
- **View:** Workbook Views, Show/Hide, Zoom, Window, Macros

To Create a New Workbook:

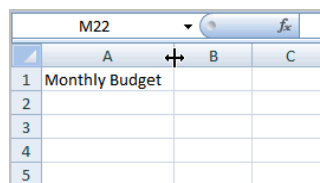
- Left-click the **Microsoft Office Button**.
- Select **New**. The New Workbook dialog box opens and Blank Workbook is highlighted by default.
- Click **Create**. A new, blank workbook appears in the window.

Modifying Columns, Rows, and Cells

When you open a new, blank workbook, the cells, columns, and rows are set to a **default size**. You do have the ability to change the size of each, and to insert new columns, rows, and cells, as needed.

To Modify Column Width:

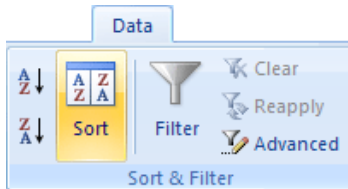
- Position the **cursor** over the **column line** in the column heading and a **double arrow** will appear.



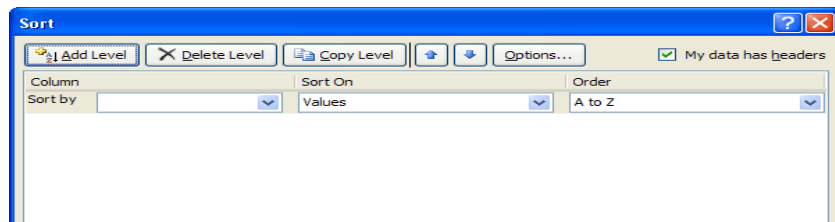
- Left-click the mouse and **drag** the cursor to the **right** to **increase** the column width or to the **left** to **decrease** the column width.

Sorting Data by District and Group Name

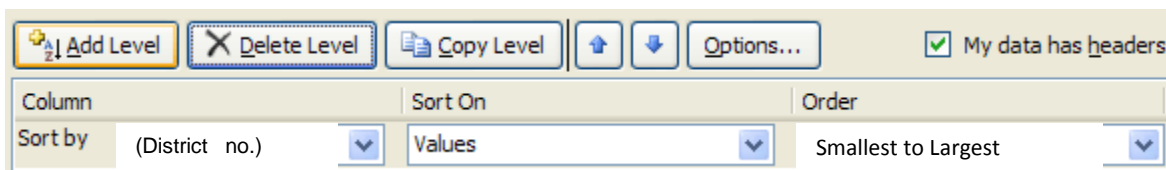
- Select the range of data you want to sort, remembering to select the entire column.
- From the Excel 2007 Ribbon at the top of the screen, click **Data**:



- From the **Sort & Filter** panel, click **Sort**
- In the sort warning dialog box click on “**Expand the selection.**” and the **Sort** button.
- A dialogue box appears: If your columns have headings, make sure the box is checked so the program won't try to sort the headings along with the data.



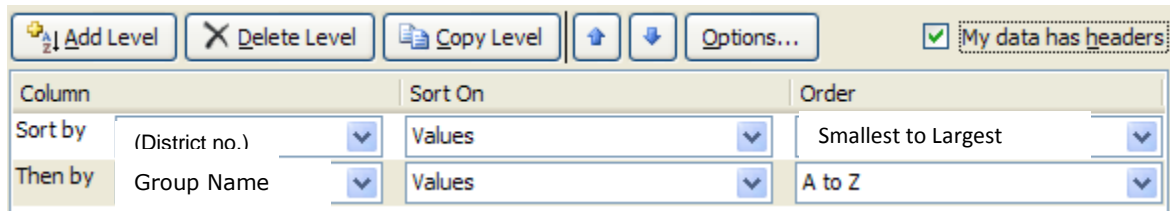
- The **Sort By** drop-down list seems empty. Click the down arrow to reveal the column you selected:
- Select values from the **Sort On** menu. Once the **Sort By** and **Sort On** options are selected, we can then move on to the **Order**.
- Click the down arrow to see the options on the Order list: Select **Smallest to Largest**. Your **Sort** dialogue box should then look like this:



- If you clicked **OK**, your data would be sorted.

If two items in your data have the same numbers, then you can specify what to sort by next. To by sort the names of the meetings within a given district alphabetically use the following procedure:

- Click the **Add Level** button, and you'll see some additional choices appear. You'll see the same lists as the **Sort By** box.
- Select the Column A (Group Name), and then Descending, Excel will do an alphabetical sort of all groups within the district



- Click **OK** to sort your data.

Save a Workbook

When you save a workbook, you have two choices: **Save** or **Save As**.

To save a document:

- Click the **Microsoft Office Button**
- Click **Save**

You may need to use the **Save As** feature when you need to save a workbook under a different name or to save it for earlier versions of Excel. Remember that older versions of Excel will not be able to open an Excel 2007 worksheet unless you save it as an Excel 97-2003 Format.

To use the Save As feature:

- Click the **Microsoft Office Button**
- Click **Save As**
- Type in the name for the Workbook
- In the Save As Type box, choose Excel 97-2003 Workbook

Closing a Workbook

To close an existing Excel Vista Workbook:

- Click **Office Button** → **Close** from the menu bar. The workbook in the Excel window is closed.

or

- Click on the **Exit Excel** button at the bottom right of the dialog box opened from the Office Button.

Excel Challenges and Solutions

- **Challenge #1**— entering data from another and/or unknown program such as the WSO printout for Group Records Coordinators

Solution #1— For the beginner it easier to simply retype the material and use the sort feature to arrange the data in the desired order.

- **Challenge #2**— sometimes it is difficult to know when to use Excel instead of Word.

Solution #2— Using Excel you can enter/import large quantities of data and can manipulate, analyze and store large tables full of numbers and other information. As a general rule, use Excel when additions will be made to the data in question. Excel is also the most widely used spreadsheet software, so files created in this program can easily be shared with others. The file format is compatible with other Microsoft programs; therefore, information can be exported to other file formats, i.e., Word, etc. when necessary. It is also easy to find someone who knows how to use it, if you need help.

- **Challenge #3**— I give up when I cannot get the values, formulas, etc to work.

Solution #3— In AI-Anon, formulas will be of the most use to a treasurer. Write formulas so that you can change the data without having to change the formulas themselves. Training or tutorials will be help with this issue.

- **Challenge #4** -- those who have a Mac Operating System (OS) rather than a Windows Operating System (OS).

Solution #4 — Excel 2004 and Excel 2008 are the newest versions of Excel for Mac users. The differences between Excel 2007 (Windows) and Excel 2008 (Macintosh) are largely attributable to differences in the operating systems. They work differently. As far as spreadsheet basics go, however, there is little difference. The fundamentals are all the same.

According to some who use both, the Mac 2008 version seems to be less sophisticated than Windows 2007. There are a number of features in Windows 2007 Excel, which are not in Mac 2008 Excel.

These comments have been extrapolated from the Microsoft forum at the following address:

<http://social.technet.microsoft.com/Forums/en/office2007deploymentcompatibility>

- **Challenge #5**—I need more help than the information given here.

Solution #5 —A listing of sources online or in books would be of help. The following sources are possible solutions to this:

- An AI-Anon member
- An adult education center for a local school district or a technical school
- A tutorial such as Video Professor or Professor Teaches
- Online tutorials such as baycongroup.com or office.microsoft.com