# INTRODUCTION

## GETTING STARTED

- Mouse Pointer
- The Workbook
- Cursor Movement
- Screen Menus and Options
  - Windows Control Buttons
  - Menu Bar
  - Toolbars
  - Formula Bar
  - Sheet Tabs
  - Status Bar
  - Altering the Screen
- Entering Data
- Saving a Workbook
- Opening a Workbook
- Creating a New Workbook

## WORKING IN EXCEL

- Creating a New Workbook
- Opening a Workbook
- Saving a Workbook
- Saving a Workbook Under a New Name
- Entering Data
- Constants
- Numeric
- Text
- Formulas

## PRINTING A WORKSHEET

- Print Preview
- Print Options
  - Orientation and Scaling
  - Margin Settings and Page Centering
  - Headers and Footers
  - Print Titles and Gridlines
- Printing

## ADDITIONAL FEATURES

- Toolbars
- Copying and Moving Data
- Replace
- Spell Check
- Number Format
- Font Size
- Borders and Patterns
- Style Changes
a. Borders.......................................................................................................................... 14
b. Patterns.......................................................................................................................... 14
5. Column Width and Row Height .................................................................................. 14
   a. Column Width............................................................................................................. 15
   b. Row Height............................................................................................................... 16
I. INTRODUCTION

This document introduces the user to Microsoft Excel 2003. Microsoft Excel is a spreadsheet program encompassing many powerful features for data manipulation and display. In addition to a fully functional spreadsheet, it provides resources for chart making, graphics embedding, and a complete macro facility.

II. GETTING STARTED

- click Start and select Programs
- select Microsoft Office Excel 2003
  -or-
- double-click

A. The Mouse Pointer

The appearance of the mouse pointer changes depending on its position on the screen and the task being performed. For example, when selecting a menu item, the pointer displays as a cross bar; when typing a cell entry, the pointer becomes an insertion point or I-beam.

<table>
<thead>
<tr>
<th>Mouse Activity</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>click</td>
<td>Press and release the left mouse button.</td>
</tr>
<tr>
<td>double-click</td>
<td>Click the left mouse button twice in rapid succession.</td>
</tr>
<tr>
<td>right-click</td>
<td>Press and release the right mouse button.</td>
</tr>
<tr>
<td>click and drag</td>
<td>Press and hold down the left mouse button while moving the mouse to a specified location, and release it. Click and drag is one method to select (highlight) cells.</td>
</tr>
<tr>
<td>point</td>
<td>Position the mouse pointer on a given item.</td>
</tr>
</tbody>
</table>

B. The Workbook

The Excel workbook consists of one or more worksheets. Each worksheet can contain spreadsheet data or charts. The sheets consist of columns ranging from A to IV forming 256 columns and 65,536 rows.
C. Cursor Movement

The cursor displays as an outlined rectangle and positions at cell A1 (cell address). The cursor is moved throughout the worksheet in the following ways:

<table>
<thead>
<tr>
<th>Functions</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse Pointer</td>
<td>Point to the cell of choice and then click the left mouse button.</td>
</tr>
<tr>
<td>Arrow Keys</td>
<td>Press to move the cursor up, down, left and right.</td>
</tr>
<tr>
<td>PgUp</td>
<td>Moves one screen up</td>
</tr>
<tr>
<td>PgDn</td>
<td>Moves one screen down</td>
</tr>
<tr>
<td>Tab</td>
<td>Moves one cell right</td>
</tr>
<tr>
<td>Shift/Tab</td>
<td>Moves one cell left</td>
</tr>
<tr>
<td>Alt/PgDn</td>
<td>Moves one screen right</td>
</tr>
<tr>
<td>Alt/PgUp</td>
<td>Moves one screen left</td>
</tr>
<tr>
<td>Home</td>
<td>Returns to column A</td>
</tr>
<tr>
<td>Ctrl/Home</td>
<td>Returns to cell A1</td>
</tr>
<tr>
<td>F5</td>
<td>Opens a menu that allows movement of a particular cell address or range.</td>
</tr>
<tr>
<td>Scroll</td>
<td>Click the scroll bars located on the right and bottom of the screen.</td>
</tr>
</tbody>
</table>

D. Screen Menus and Options

1. Windows Control Buttons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="icon" alt="Minimize" /></td>
<td>Minimizes the window in size and displays it as an icon bar.</td>
</tr>
<tr>
<td><img src="icon" alt="Restore" /></td>
<td>Restores the window to its original size.</td>
</tr>
<tr>
<td><img src="icon" alt="Close" /></td>
<td>Closes the dialog box.</td>
</tr>
</tbody>
</table>

Note: Minimize, Restore, and Close buttons are positioned in all dialog boxes in windows.

2. Menu Bar

The Main Menu Bar lists the various menus containing Excel commands. Click one of the bar items to display a pull-down menu with commands and additional options. The Main Menu Bar has its own set of controls (e.g., Minimize/Restore buttons).
3. Toolbars

The Toolbars provide shortcuts to many Excel tasks. For information on a specific icon, use the mouse pointer to point to the icon of choice. A small box appears displaying a Tool Tip, which describes the function of the icon.

To change Toolbars:

- click View and select Toolbars
- select from the predefined Toolbars or create a customized Toolbar

4. Formula Bar

The Formula Bar comprises two sections. The cell address of the active cell is displayed on the left and its contents are displayed on the right.

To activate the Edit Formula feature:

- click This displays an Insert Function dialog box which contains available functions.
  - select a function and click OK

5. Sheet Tabs

A new workbook is comprised of several worksheets and automatically begins on Sheet1. To change to another sheet in the workbook, click one of the corresponding sheet tabs (e.g., Sheet 1, Sheet 2, etc.).

To rename a sheet:

- double-click Sheet Tab of choice

The tab is selected and the pointer is displayed as an I-beam.

- type newname and press Enter

Where newname is the name given to the sheet.
6. Status Bar

The Status Bar displays the status of any operation currently being performed, such as entering data into a cell, saving a file, etc.

7. Altering the Screen

The appearance of the worksheet screen can be altered. For example, to remove the Formula or Status Bars:

- click View and select Formula or Status Bar

To save the current view for later use:

- click View and select Custom Views
- click Add
- type name for current view

Where name is the name given to the Custom View.

- click OK

III. WORKING IN EXCEL

A. Creating a New Workbook

An Excel workbook consists of one or more spreadsheets, chart sheets, and/or macro sheets. A workbook must contain at least one spreadsheet. To create a new workbook:

- click
- or-
- click File and select New

Note: The New Workbook task pane appears on the right of the screen showing various options.

- click Blank Workbook under New

A blank workbook displays.
B. Opening a Workbook

To open a previously saved workbook:

• click
  -or-
• click File and select Open

To select the appropriate drive and/or directory in order to display the files:

• click ▼ in Look in
• select drive (e.g., A:)
• select filename of choice
• click Open
  -or-
• click the filename of choice under Open

Note: In the Getting Started task pane, a list of previously used files appears under open.

C. Saving a Workbook

Before exiting from Excel, save the workbook. To save an existing workbook:

• click
  -or-
• click File and select Save

Note: To save a new workbook file, select Save As from File and give the workbook a filename.

D. Saving a Workbook under a New Name

• click File and select Save As

Select the appropriate drive and/or directory if necessary.

• click ▼ in Save in and select the correct drive
• click in File name and type new filename

Where filename is the name given to the file.

• click Save

Note: The original workbook file is not affected. Select Save As if the workbook had not been previously saved.
E. Entering Data

To enter data:

- click cell of choice
- type data

Where data is the information entered in the cell.

- press Enter, Tab, or an arrow key

Note: Excel will assume the type of cell entry from the first character typed.

There are two types of cell entries-Constants and Formulas. Constants are values entered directly into the cell. It can be a numeric value or text. Formulas are a sequence of values, cell references, and operators that produce a new value from existing ones.

1. Constants
   
a. Numeric

Numeric constants may begin with 0 through 9, or one of the numeric symbols $ + - . or (. They are right justified in the cell, and cannot have more than one decimal point. Scientific notations are entered using the following format: 123E+07.

   Note: Numbers are automatically formatted according to the symbols used (e.g., If entering 34.5%, Excel recognizes the percent sign and formats the cell accordingly).

b. Text

Text is commonly used for headers and may contain up to 255 characters. They are left justified in the cell. If an entry begins with a number, Excel assumes the entry is numeric. If the number is preceded with an apostrophe the entry is interpreted as text and will be left justified. Text, which exceeds the cell width is displayed, provided that the adjacent cells are empty.

2. Formulas

A formula begins with an equal sign. Arithmetic formulas calculate values using both cell addresses and numbers:

Examples:

- Numbers: =5+3
- Cell addresses which contain numbers: =A6*B8
Logical formulas compare two values or cells and return either a true (numeric value of 1) or a false (numeric value of 0). For example, \(+T5<4\) returns a result of true if the value in cell T5 is less than 4, otherwise it returns false. The result of the formula is displayed in the cell. The formula itself is visible in the contents box located near the top center of the screen, just below the Toolbars (icons).

F. The Function Keys

The following provides a partial listing of Excel operations and their corresponding function keys:

<table>
<thead>
<tr>
<th>Excel Operations</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>HELP (F1)</td>
<td>Opens the main Excel help menu.</td>
</tr>
<tr>
<td>EDIT (F2)</td>
<td>Puts Excel in edit mode to allow the editing of a cell's contents.</td>
</tr>
<tr>
<td>PASTE (F3)</td>
<td>Opens the Paste Name dialog box, if any names are defined.</td>
</tr>
<tr>
<td>GOTO (F5)</td>
<td>Moves the mouse pointer to the cell or range name specified.</td>
</tr>
<tr>
<td>PANE (F6)</td>
<td>Switches between multiple panes in worksheets that have been split.</td>
</tr>
<tr>
<td>SPELL (F7)</td>
<td>Activates spell checker.</td>
</tr>
<tr>
<td>SELECTION (F8)</td>
<td>Selects multiple cells.</td>
</tr>
<tr>
<td>MACROS (Alt-F8)</td>
<td>Opens Macro dialog box.</td>
</tr>
<tr>
<td>CALC (F9)</td>
<td>Recalculates all worksheet formulas. The calculation option must be set to Manual in the Option dialog box for this function.</td>
</tr>
<tr>
<td>MENU (F10)</td>
<td>Activates the Main Menu Bar (equivalent to pressing the Alt key).</td>
</tr>
<tr>
<td>GRAPH (F11)</td>
<td>Graphs the cell values.</td>
</tr>
<tr>
<td>SAVE (F12)</td>
<td>Opens the Save As dialog box.</td>
</tr>
<tr>
<td>EXIT (Alt-F4)</td>
<td>Exits Excel.</td>
</tr>
</tbody>
</table>

G. Getting Help

1. Help

Excel provides methods for accessing help for all commands and functions. To open the main Help menu at any time:

- click Help from Menu Bar
- select Microsoft Excel Help
  -or-
- press F1
A question box appears allowing the user to type in a question.

After typing in a question:

- click ➡
- select the topic closest to the question

A Microsoft Excel Help dialog box appears to the right of the screen.

2. Office Assistant

The Office Assistant is an animated character that appears on the screen to offer help. Type in a question and click the Search button. The Office Assistant responds with a list of options. If a light bulb is displayed beside the Office Assistant, click to view a tip about the current action.

If the Office Assistant is not present:

- click Help
- select Show the Office Assistant

To exit:

- click Help
- select Hide the Office Assistant

H. The Undo Command

In order to reverse the most recent entry or action:

- click ➡
- or-
- click Edit and select Undo
- or-
- press Ctrl-Z
I. Editing Data

Editing cells is a means of changing the information in a particular cell or replacing it with new data. There are two ways to edit a cell:

- move mouse pointer to that cell, click, and retype contents
- double-click cell of choice
- click cell once and press F2

Note: Use any combination of Backspace key, arrow keys, or Insert and Delete keys to edit cell contents.

When editing is complete:

- click \( \checkmark \) to enter data or press Enter

To delete a range of cells:

- click and drag to select range of cells
- press Delete
- click Edit and select Clear
- select option of choice

J. Exiting from Excel

To exit from Excel:

- click File and select Exit

Note: If the workbook has been changed since the last time saved, a dialog box asks to save the changes before exiting (page 5).

IV. PRINTING A WORKSHEET

A. Print Preview

To preview the worksheet prior to printing:

- click \( \) -or-
- click File and select Print Preview
Printing a Worksheet

A window displays a representation of the printed page(s). Buttons along the top of the window allow to print the sheet or change any of the print setup options described below.

- click Close to return to worksheet screen

B. Print Options

It is possible to enhance or alter the appearance of the printed worksheet by adding headers, footers, or page titles, changing the margins, or choosing from other options.

1. Orientation and Scaling

To change the orientation of the printout:

- click File and select Page Setup
- click Page
- select page orientation of choice (portrait or landscape)
- click OK

To choose to have Excel automatically scale the sheet to fit on a specified number of pages:

- click File and select Page Setup
- click Page
- click Fit to and enter number of pages (wide and tall)
- click OK

2. Margin Settings and Page Centering

To change the Margin Settings:

- click File and select Page Setup
- click Margins
- enter a value for any of the margins
- click OK

To center the worksheet (horizontally and/or vertically) on the printed page:

- click File and select Page Setup
- click Margins
- select Horizontally and/or Vertically
- click OK
3. Headers and Footers

Excel provides predefined headers/footers.

- click **File** and select **Page Setup**
- click **Header/Footer**

To use a predefined header or footer:

- click on the ▼ under Header or Footer sections
- select a predefined Header or Footer
- click **OK**

A customized set can also be created. To create a customized header/footer:

- click **Custom Header** or **Custom Footer**

Each custom header/footer is divided into a left, center and right section.

- click in the section to be created
- type the desired information and/or click anyone of the icons of choice

Note: Icons on the custom header/footer toolbar automatically insert the date, time, page number, etc.

Excel returns to the **Page Setup** dialog box.

Note: To move to another section without exiting Page Setup, click Ctrl + Tab keys.

To exit the **Page Setup** dialog box:

- click **OK**

4. Print Titles and Gridlines

- click **File** and select **Page Setup**
- click **Sheet**
- click in **Rows to repeat on top**
- type *rownumber : rownumber*

Where *rownumber* is the row chosen to be repeated.

Note: An alternative method is to click ▶ next to Rows to repeat on top and select row from the worksheet. Click ▶ to return back to the **Page Setup** dialog box. Then click OK when finished.
Printing a Worksheet

The worksheet prints with or without the gridlines. To toggle between the two choices:

- click **File** and select **Page Setup**
- click **Sheet**
- click **Gridlines**
- click **OK**

C. Printing

To print the current worksheet:

- click ![print icon]
  -or-

- click **File** and select **Print**
  - select any options of choice
  - click **OK**

V. ADDITIONAL FEATURES

A. Toolbars

Excel features are invoked via toolbars or menus. If a particular icon does not display:

- click **View** and select **Toolbars**

From the Toolbars submenu:

- click the Toolbar set to display

B. Copying and Moving Data

It is possible to copy or move a range of cells to another location on the worksheet, or to a different worksheet in the workbook.

1. Copying

To copy and paste:

- click and drag to select range
- click ![copy icon]
  -or-
- click **Edit** and select **Copy**
  - click where data is to be place
Additional Features

- click
  -or-
- click **Edit** and select **Paste**

**Note:** The Paste Options icon appears when pasting. This allows the user to choose a paste format.

2. **Moving**

To cut and paste:

- click and drag to select range
- click
  -or-
- click **Edit** and select **Cut**
- click where data is to be placed
- click
  -or-
- click **Edit** and select **Paste**

**Note:** The clipboard icon appears when pasting. By clicking on the icon, the user is able to choose the format to paste in.

C. **Spell Check**

To spell check the text entered in the worksheet:

- click
  -or-
- click **Tools** and select **Spelling**

Spell Check suggests alternative spellings for misspelled or unrecognized words.

D. **Replace**

To search for and replace characters or words in the worksheet:

- click and drag to select range to be searched
- click **Edit** and select **Replace**
- enter character or word that is to be changed in **Find what**
- enter character or word that is to be replaced with in **Replace with**
- select any options of choice
- click **Replace**
E. Style Changes

By changing the font type and size, adding patterns and borders, changing column widths and row heights, along with other options, the appearance of the worksheet is changed. Some of these changes can also be made from the Toolbars.

1. Font Type

- click and drag to select range of choice
- click □ beside font type Arial
- click font of choice

2. Font Size

- click and drag to select range of choice
- click □ beside font size box □10□ and select point size
- or-
- click in font size box and enter point size
- press Enter

3. Number Format

To change the format in which numbers display:

- click and drag to select range to format
- click Format and select Cells
- click Number
- select format (Date, Currency, etc)
- click OK

4. Borders and Patterns

A variety of borders and background patterns can be added to a specific range.

a. Borders

To change the type of border in a range of cells:

- click and drag to select range of choice
- click Format and select Cells
- click Border
- select border (e.g., border style, line style, and color)
- click OK
b. **Patterns**

To change the background pattern of a range of cells:

- click and drag to select range of choice
- click **Format** and select **Cells**
- click **Patterns**
- select pattern (e.g., pattern style and color)
- click **OK**

**5. Column Width and Row Height**

Values that are wider than the cell width will be shown in scientific notation. The column must be widened to display the value in standard form. Click and drag using menu options or have Excel automatically widen the column to fit the widest entry.

a. **Column Width**

To change the width of a column using click and drag:

- point to right edge of column on column tab

The mouse pointer becomes a two-headed horizontal arrow.

- click and drag right to widen column, or left to narrow it

To change the width of one or more columns via menus:

- click any cell in column
  - or-
  - click and drag to select range of columns to resize
- click **Format** and select **Column**
- click **Width** and enter width
- click **OK**

To have Excel automatically widen the column(s) to fit the widest entry:

- click any cell in column
  - or-
  - click and drag to select range of columns to resize
- click **Format** and select **Column**
- click **AutoFit Selection**
b. **Row Height**

To change the height of a row using click and drag:

- point to lower edge of row on row tab

The mouse pointer becomes a two-headed horizontal arrow.

- click and drag down to increase height of the row, or up to decrease it

To change the height of one or more rows via menus:

- click any cell in row
- or-
- click and drag to select range of rows to resize
- click **Format** and select **Row**
- click **Height** and enter height
- click **OK**

To have Excel automatically adjust the height of the row(s) to fit the tallest entry:

- click any cell in row
- or-
- click and drag to select range of rows to resize
- click **Format** and select **Row**
- click **AutoFit**