

IT Skills - Excel 1

NOTES

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1. Starting with Excel - Notes

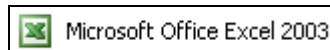
This chapter covers the following topics:

- Starting Excel
- Exiting Excel
- The Main Program Window

Starting Excel

To start Microsoft Excel:

- Click the **Start** button, point to **Programs** and then locate and click the **Microsoft Office Excel 2003** program icon.



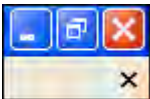
Useful Tip

- There are other ways of starting Microsoft Excel and opening workbooks at the same time, but this is the simplest way of just starting the program.

Exiting Excel

There are two main ways of exiting Excel:

- Choose the **File | Exit** command.
- Click the Close button in the top right-hand corner of the Excel window.

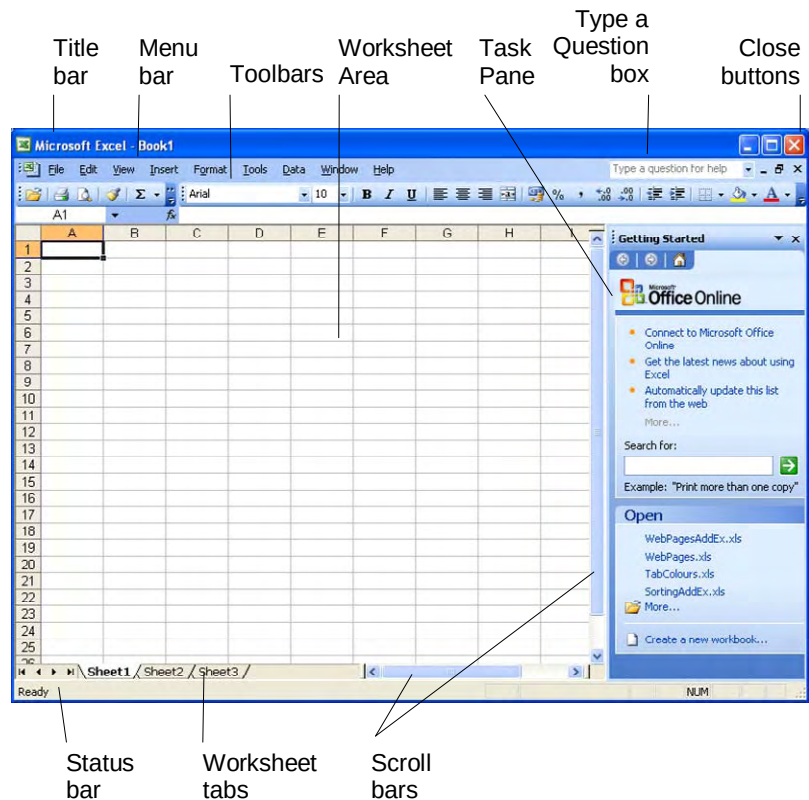


Important Points

- There are two similar  Close buttons.
- The top button of the two is called Close — this will exit Excel.
- The bottom button is called Close Window — this always closes the current workbook without exiting Excel.
- In all cases, if there is a workbook open that hasn't been saved since it was last changed, Excel will prompt you to save it.

The Main Program Window

When you start Microsoft Excel, the main program window is displayed and a new workbook is created. The main elements of the program window are named in the next picture.



- When you start Microsoft Excel, what you see on your system may not match the picture. The layout, view, toolbars, task pane, etc., displayed in the window may be different — it depends on whether or not the program has been used previously.

2. Menus and Toolbars - Notes

This chapter covers the following topics:

- Accessing Program Functions
- The Menu System
- Two-Step Menus
- Buttons and Toolbars
- Showing and Hiding Toolbars
- Arranging Toolbars
- Customising Toolbars
- The Standard and Formatting Toolbars
- Task Panes
- Shortcut Key Combinations

Accessing Program Functions

In common with all Windows application programs, there are several ways of accessing the program features and options:

- Use the menu system — this is accessible with both the mouse and the keyboard.
- Use the toolbar.
- Use the task panes.
- Use shortcut key combinations.

The Menu System

There is a Menu bar along the top of the screen. The first three menu headings are: **File**, **Edit** and **View**.

To display a menu:

- Click the menu heading.
- or:
- Hold down the **[Alt]** key and press the key corresponding to the underlined letter in the menu heading — **[Alt]+F** will open the **File** menu.
- or:
- Press and then release the **[Alt]** key and then use the **[Arrow]** keys to navigate the menu system — press the **[Down Arrow]** (↓) key to open one of the menus.

Important Point

- A list of menu options will be displayed.

Two-Step Menus

When you first open a menu, Excel may only show the most common or recently used options and hide the others.

To see all of the available menu options:

- Keep the menu open for approximately 5 seconds.

or:



- Click the double-arrow button at the bottom of the menu.

Buttons and Toolbars



Some features can be accessed quickly by clicking buttons in the toolbars. The example in the margin is the toolbar button for opening an existing workbook. If you point the mouse at any button without clicking it, a ScreenTip will name the button.

- As you work with the program, the toolbar buttons that you use most often will be displayed in the toolbars on your screen; those that you use infrequently will be moved off the toolbar. If you cannot see the button you want, click the Toolbar Options button and locate the button in the palette that is displayed.

Showing and Hiding Toolbars

There are several individual toolbars.

To show and hide a toolbar:

- Right-click any toolbar — a list of available toolbars is displayed.
- Click the name of the toolbar that you want to hide or show.

Important Point

- Some toolbars appear and disappear automatically according to what you are doing at the time. For example, the Chart toolbar will appear if you click a chart in your workbook, and then disappear when you click a cell again.

Arranging Toolbars

Each toolbar is separate and can be moved around within the program window. A toolbar can be **docked**, i.e. positioned along one of the edges of the window, or **floating**, i.e. positioned elsewhere on the screen.

To move a toolbar:

- On a docked toolbar, drag the move handle.
- On a floating toolbar, drag the Title bar.

Important Points

- In both cases, if you drag the toolbar to the edge of the program window or to a location beside another docked toolbar, it becomes a docked toolbar.
- When two or more toolbars are docked in a line, you can drag the move handle to resize each one.

Customising Toolbars

There are a few simple options that you may want to change — positioning the Standard and Formatting toolbars on one or two lines; turning the two-step menu feature on and off; and showing large icons.

These options are changed via the Customize dialog box.

To open the Customize dialog box:

- Right-click any toolbar or the menu bar and choose the **Customize** command from the shortcut menu that appears.

Important Point

- The various options can be found in the **Options** tab.

The Standard and Formatting Toolbars

The main toolbars are the Standard toolbar and the Formatting toolbar.



Standard toolbar



Formatting toolbar

Task Panes

Task panes are a special kind of toolbar that contain different sets of related options. The task pane is normally docked on the right-hand edge of the program window, but you can move it around like the other toolbars.

Selecting certain menu options automatically displays the related task pane, but you can also select to display and hide it yourself.

To display the task pane:

- Choose the **View | Task Pane** command.
- If necessary, select which task pane you want to view using the list box in the current task pane Title bar.

To hide the task pane:



- Choose the **View | Task Pane** command.
- or:
- Right-click a toolbar and choose the **Task Pane** command from the shortcut menu.
- or:
- Click the Close button in the current task pane.

Shortcut Key Combinations

Some program features have a shortcut key combination. The shortcut key combination is shown alongside the corresponding menu option. Pressing the shortcut key combination chooses the feature without having to open the menu system.

Some common shortcut key combinations are:

[Ctrl]+N	New workbook	[Ctrl]+X	Cut
[Ctrl]+O	Open workbook	[Ctrl]+C	Copy
[Ctrl]+S	Save	[Ctrl]+V	Paste
[Ctrl]+P	Print	[Ctrl]+Z	Undo

3. Views, Resizing and Zooming - Notes

This chapter covers the following topics:

- Maximising, Restoring and Resizing a Window
- Views

Maximising, Restoring and Resizing a Window

The Excel program and workbook windows can be resized in the standard Windows way:



- Clicking the Maximize button makes the window fill the whole of the screen.
- Clicking the Restore button returns the window to the same size as it was before it was maximised.
- After clicking the Restore button, the window can be resized by dragging any of its borders, or moved by dragging its Title bar.
- Clicking the Minimize button reduces the window to a small button in the Taskbar.
- Using the buttons in the Title bar changes the program window, using the buttons at the right-hand edge of the Menu bar changes the Workbook window.

Views

Excel has two main views that you can switch between: **Normal** view and **Page Break** view. Each view has its different uses:

Shortcut button	View	Description
	Normal	The normal view for editing and formatting your workbook.
	Page Break	Displays your workbook much smaller, but with clear marking as to how the pages will be split when you print the workbook.

To select a view:

- Use the commands in the **View** menu.

4. Basic Spreadsheet Skills - Notes

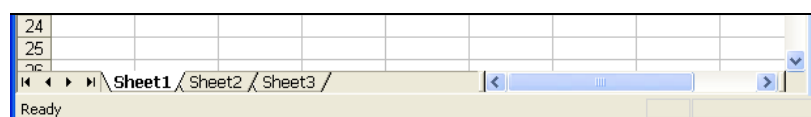
This chapter covers the following topics:

- Workbooks and Worksheets
- The Mouse Pointer
- Rows, Columns and Cells
- Cell Ranges
- The Active Cell and Cell Pointer
- Selecting Individual Cells
- Selecting a Range of Cells
- Entering Cell Values
- Entering Text and Numbers
- Entering Currency and Percentage
- Entering Formulas
- Building Formulas Using the Mouse
- In-Built Functions
- AutoFit
- Changing Cell Entries
- Cancelling a Change
- Undoing a Change
- Deleting a Value
- Error Messages, ##### and More

Workbooks and Worksheets

When Excel starts it automatically opens a new workbook. This comprises a number of worksheets — the default number is three. You can easily add other worksheets or delete any you don't need.

- The worksheet contains the grid where you enter text, numbers and formulas. You can also add lines, rectangles, pictures and charts to enhance your worksheet and make the information easier to understand.
- Worksheet tabs are shown in the bottom left-hand corner of the workbook window. The tab for the active worksheet — Sheet1 in the next picture — is shown with a white background.



The Mouse Pointer

The **mouse pointer** is the small picture that moves around your screen as you move your mouse. It changes its shape according to where you position it:



- Over the workbook area it will be a white cross.
- Over the Formula Bar, or a toolbar list box, it will be an I-beam.
- Over a menu option, a toolbar button, the Status bar, a scroll bar or the Windows Taskbar, the mouse pointer will be an arrow.
- Over the borders of a window, or other object that you can resize, it will be a double-headed arrow.

Important Point

- The mouse pointer may change to other shapes at other times.

Rows, Columns and Cells

The workbook window displays the first worksheet. This comprises a grid made up of rows and columns. The rows are numbered **1, 2, 3**, etc. and the columns **A, B, C**, etc. Each individual cell on the grid has its own unique identity — the **cell reference**. This is made up from the names of the column and the row that the cell is in, e.g. **A1, B5**.

Cell Ranges

The grid of a worksheet is made up of individual cells, each uniquely identified by a cell reference.

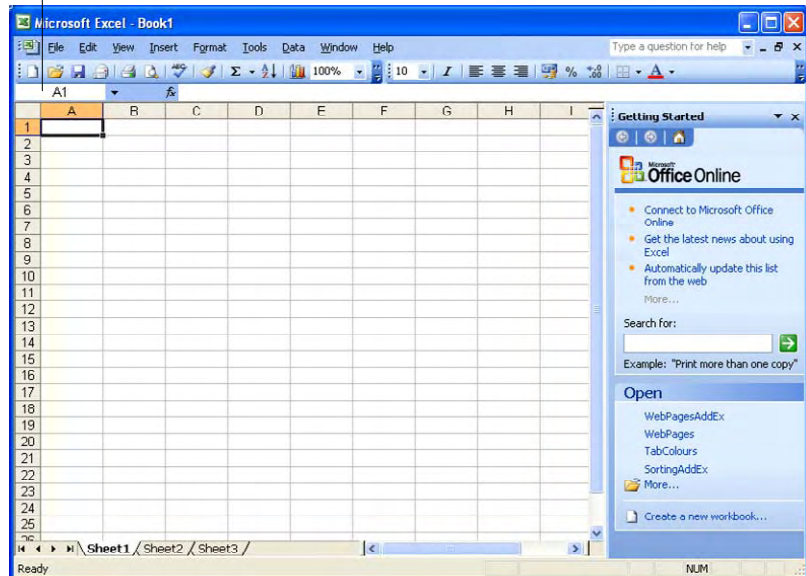
A block of cells is called a **cell range** and is identified by the first and last cell references separated by a colon, e.g. **C3:H10**.

The Active Cell and Cell Pointer

Whenever you enter information in a workbook — text, numbers or a formula — it is always inserted in the **active cell**. The black frame that surrounds the active cell is called the **cell pointer**.

When a cell is active, its cell reference is displayed in the **Name box** in the left-hand edge of the Formula Bar. Also, the column and row headers for the cell are highlighted.

Name box with cell reference A1 —
the active cell



Selecting Individual Cells

You can make a cell active, or **select** it, in three ways.

To select a cell:

- Click the cell with the mouse pointer.
- or:
- Use the **[Arrow]** (←→↑↓) keys to move the cell pointer to the required cell.
- or:
- Use the Go To dialog box — this is accessed by choosing the **Edit | Go To** command.

Selecting a Range of Cells

You can select a range of cells in several ways. These include:

- Drag the mouse over the range.
- Move the cell pointer to the first cell in the range, hold down the **[Shift]** key and extend the selection using the ←→↑↓ keys.

Important Point

- The cell you start with will be the active cell. As you drag the mouse over the selection, or extend the selection with the **←→↑↓** keys, the Name Box displays the number of rows and columns currently selected.

Entering Cell Values

When you create a workbook, you will want to enter text and numbers in various cells.

To enter text or numbers in a particular cell:

- Select the cell.
- Type your entry.
- Press **[Enter]** to confirm the entry.

Important Points

- When you enter text, the cell may not be wide enough. If the cell alongside is empty, the text will run over into the empty space. If the cell alongside is not empty, some of the text will be hidden — it is not lost, just not visible. One option is to change the cell width.
- When you press **[Enter]**, the cell pointer moves to the cell below. You can also use the **←→↑↓** keys to confirm the entry. These move the cell pointer one cell to the left, right, up or down, respectively.

Entering Text and Numbers

Entering text, numbers and formulas in cells is simple, but you have to be careful if you want to enter a text that looks like a number. For example, if you want to enter the year 2001 — if you just type **2001**, Excel will think you are typing the number **2001** and treat it differently.

- To enter text, just type the text you want, e.g. **January**.
- To enter a number, just type the number you want, e.g. **47**.
- To enter text that looks like a number, start with an apostrophe ', e.g. **'2001**.

Entering Currency and Percentage

To enter currency and percentage values as you type:

- To enter a currency value, just type **£** followed by the amount, e.g. **£23.05**.
- To enter a percentage, just type the value followed by a **%**, e.g. **47%**.

Entering Formulas

Once you have entered a set of figures in a worksheet, it is likely that you will want to do something with them — add them up or find the average, for example. After all, that is what using spreadsheets is all about.

When you enter a formula, you must start with an equals sign. The rest of the process is much the same as that for entering text and numbers.

To enter a formula:

- Start with an equals sign = and then type the formula using the cell references for the cells included in the calculation, e.g. **=A1+B1**.

Important Points

- When you enter formulas, it doesn't matter whether you use upper case or lower case letters — **B6** is the same as **b6**.
- The multiplication sign is an asterisk * not a ×.

Building Formulas Using the Mouse

Another way of entering a formula is to build it in steps. You do this by clicking the cells involved and filling in the operators, e.g. + - * /, as you go. However, you must always remember to start with an equals sign.

In-Built Functions

Excel has some built-in functions that you can use in your formulas. The most common of these is the SUM function, which adds together the contents of all the cells in a specified range.

- Functions must always follow a specified format. **SUM**, for example, must be followed by a range of cells in brackets, e.g. **=SUM(D2:D7)**.
- Assume you have three values in cells **A1**, **A2** and **A3**. The following formulas are equivalent:

=A1+A2+A3 =SUM(A1:A3)

AutoFit

To adjust the column width to the widest entry in that column:



- Move the mouse pointer over the right-hand border of the column header so the mouse pointer changes to a double-headed arrow.
- Double-click on the right-hand border of the column header.

Changing Cell Entries

Sometimes you will realise that you have entered the wrong value in a cell, or wish to investigate what happens if you change a value.

To change a cell entry:

- Select the desired cell using the mouse or keyboard.
- With the desired cell selected, type a new entry to replace the current entry, or click on the Formula bar and modify the current entry there.
- When you have finished, confirm the change by pressing **[Enter]**.

Cancelling a Change

If you are in the middle of changing a cell value, you can cancel the change.

To cancel a change:

- Press the **[Esc]** key.

Undoing a Change

If you make a change and then regret it, you can undo the change and revert to the previous value of the cell.

To undo a change:

- Choose the **Edit | Undo** command.

or:

- Click the Undo button.

or:

- Press **[Ctrl]+Z**.



Deleting a Value

To delete the value in the active cell as follows:

- Press the **[Delete]** key.

Error Messages, ##### and More

A few things can happen when you start entering values and using formulas.

- If the result of a formula is a number that is too big to fit in a cell, Excel will automatically try to widen the column, but if this is not possible it will show **#####** instead of the value. Don't worry! Excel still has the value stored and increasing the width of the column will allow the number to be displayed.
- Occasionally you may try to do something with a formula that is not possible. For example, add a word to a text value, or divide by zero. If this happens Excel shows an error in the relevant cell, for example, **#DIV/0!** or **#VALUE!**
- Excel sometimes shows a small triangle in the top left-hand corner of the cell and a small error button as shown to in the margin here. You can point to the error box and read the Screen Tip that is shown and open the Error button list box and select one of the menu options. You can also just ignore it.



5. Saving Workbooks - Notes

This chapter covers the following topics:

- Saving a Workbook
- Filenames
- Save As

Saving a Workbook

As you build a workbook it is shown directly on your screen. A copy of the workbook is stored in your computer's memory. However, if you exit Excel, or turn off your computer, your workbook will be lost.

When you save a workbook, you make a copy of it on your hard disk, diskette, network server, or other media. You can access the copy whenever you wish.

To save a workbook:

- Choose the **File | Save** command.

or:

- Click the Save button.

or:

- Press **[Ctrl]+S**.



Important Points

- The first time you save a particular workbook, you need to tell Excel where you want to store it and what you want to call it — this is done in the Save As dialog box.
- When you save the workbook on subsequent occasions, Excel automatically updates your file without asking any questions.

Filenames

When you save a workbook for the first time, you have to enter a **filename** for it.

- Windows allows you up to 255 characters for the filename.
- Use a meaningful filename that reminds you of what the workbook is — **Book1, Book2, Book3**, etc. soon become meaningless when you have hundreds of workbook files.
- You can use letters, numbers, spaces and most other characters in your filenames, but do not use a full stop.

Important Point

- You can't have two workbooks with the same filename stored in the same folder, but you can have two workbooks with the same filename if they are stored in different folders.

Save As

Excel has a Save As dialog box that allows you to save a new copy of the current workbook — you can change any of the following:

- The filename — to create a new copy of the workbook with a different filename.
- The location — i.e. the drive and/or folder where the workbook is stored.
- The file type — Excel can convert your workbook to different formats such as plain text files (.txt), web pages (.html), or comma separated files (.csv).

To display the Save As dialog box:

- Choose the **File | Save As** command.

Important Points

- Remember that the Save As dialog box is also opened automatically when you save a workbook for the first time.
- You can also create new folders via the Save As dialog box — this is useful to help you organise your workbooks.

6. Opening and Closing Workbooks - Notes

This chapter covers the following topics:

- Opening Existing Workbooks
- Recently Used Workbooks
- Closing Workbooks

Opening Existing Workbooks

Workbooks are normally opened via the Open dialog box.

To display the Open dialog box:

- Choose the **File** | **Open** command.

or:

- Click the Open button.

or:

- Press **[Ctrl]+O**.



Important Point

- A list of available workbooks is shown in the Open dialog box. You can change the drive and folder to look for files in other locations and use the **File type** list box to look for files of a different type such as web page workbooks.

Recently Used Workbooks

Excel keeps track of the last workbooks that you have used and lists them in the **File** menu.

To open workbooks listed in the File menu:

- Open the **File** menu and choose one of the available workbooks — they will be at the bottom of the menu.

Closing Workbooks

To close the current workbook:

- Choose the **File | Close** command.

or:

- Click the Close Window button in the top right-hand corner of the window, just below the Close button for the Excel window.

or:

- Press **[Ctrl]+W**.

or:

- Each open workbook has its own button in the Taskbar at the bottom of the screen — right-click the button for the workbook that you want to close and choose **Close**.



Important Points

- In all cases, if you have changed the workbook you are closing since it was last saved, Excel will ask you if you want to save it before closing it.
- If you choose to exit Excel, all open workbooks will be closed, but you will be prompted to save each individual workbook that has been changed.

7. Creating New Workbooks - Notes

This chapter covers the following topics:

- New Workbooks
- The New Workbook Task Pane
- New Blank Workbook

New Workbooks

When you start Excel a new blank workbook is created automatically. However, you will often want to start a new workbook when Excel is already running.

There are three types of workbook you can create:

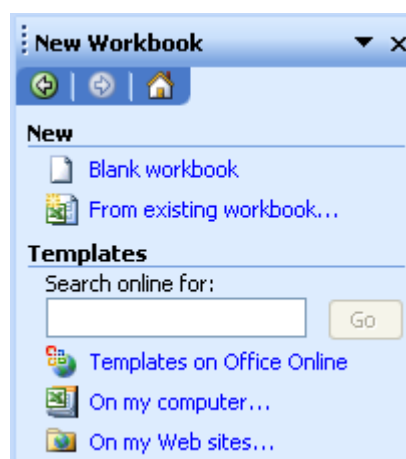
- A new blank workbook.
- A workbook based on an existing workbook — when you do this, a copy of the existing workbook is automatically created for you to use — the original is not affected.
- A workbook based on a template — Excel has several general templates that are supplied with the program.

The New Workbook Task Pane

The New Workbook task pane offers you several shortcuts for creating new workbooks and opening recently used workbooks.

To show the New Workbook task pane:

- Choose the **File | New** command.



To hide the New Workbook task pane:

- Choose the **View | Task Pane** command.
- or:
- Click the small Close button in the task pane Title bar.
- or:
- Right-click the toolbar area and choose **Task Pane**.

New Blank Workbook

To create a new blank workbook without using the New Workbook task pane:



- Click the New button.
- or:
- Press **[Ctrl]+N**.

To create a new blank workbook using the New Workbook task pane:

- Under the **New** heading, click **Blank Workbook**.

8. Navigating Large Workbooks - Notes

This chapter covers the following topics:

- Moving the Cell Pointer
- Using the Keyboard
- Using the Mouse
- Shifting Between Worksheets

Moving the Cell Pointer

The larger a workbook is the more you will need to move the cell pointer around to view different sections of it. You can use the mouse or the keyboard to do this.

Using the Keyboard

You can use the special navigation keys to navigate through a workbook — these automatically move the cell pointer at the same time.

- The main navigation keys are as follows:

[Ctrl]+[Home]	beginning of workbook (cell A1)
[Ctrl]+[End]	end of workbook
←→↑↓	one cell in given direction
[Ctrl]+←→↑↓	move to edge of block of data
[Home]	beginning of current row
[Page Down]	one screen downwards
[Page Up]	one screen upwards
[Alt]+[Page Down]	one screen to the right
[Alt]+[Page Up]	one screen to the left
[Ctrl]+[Page Down]	next sheet in the workbook
[Ctrl]+[Page Up]	previous sheet in the workbook

- Pressing the [End] key turns End mode on and off. The word **End** appears in the Status Bar when End mode is on. In End mode there are several shortcut key combinations available, but none of them are so important for a new user.

Using the Mouse

To move the insertion point with the mouse:

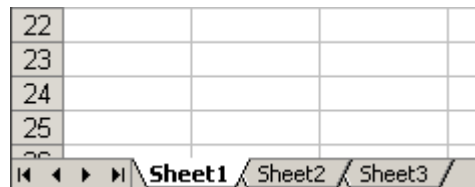
- Click anywhere on the worksheet to move the cell pointer there.

Important Points

- If the position you want for the cell pointer is not visible, you can scroll the worksheet before clicking on it.
- To scroll the worksheet using the mouse, use the scroll bars to move up and down and possibly left and right, or use the central wheel on your mouse to scroll up and down the worksheet — not all mice have a central wheel.
- Using the scroll bars and central wheel does not automatically move the cell pointer — you need to click on the worksheet after using them to move it.

Shifting Between Worksheets

By default new workbooks have three worksheets, but they can have as little as one worksheet or many more than three. Each worksheet has its own tab at the foot of the workbook window.



- The current, or active worksheet has a white tab, the other tabs are shaded. It is possible to rename tabs and colour them.

To shift between worksheets using the mouse or keyboard:

- Click the desired worksheet tab.
- Press **[Ctrl]+[Page Down]** to shift to the next worksheet.
- Press **[Ctrl]+[Page Up]** to shift to the previous worksheet.

9. Selecting in Worksheets - Notes

This chapter covers the following topics:

- Selection Summary
- Selecting a Single Cell
- Selecting a Range of Cells
- Selecting an Entire Row or Column
- Selecting Adjacent Rows or Columns
- Selecting Non-Adjacent Cells and Cell Ranges
- Selecting an Entire Worksheet

Selection Summary

Selecting cells, rows, columns and worksheets is an important skill for using Excel. You can select any cell, a continuous block of cells (a **cell range**), rows or columns using the mouse, the keyboard, or a combination of the two. You can also select cells, blocks of cells, rows or columns that are not next to each other — this is called selecting **non-adjacent** cells.

- When cells are selected, they display a selection highlight. For a single block of cells, the block will have a black border, and the cell background will be lilac. If several blocks of cells are selected, none of the blocks will have a border, but all the cells will have a lilac background.
- When a cell range is selected, one of the cells will be the **active cell** — this is the cell in which anything you type will be entered. The active cell is the first cell that you selected when you selected the cell range, and will have a white rather than lilac background. If you have selected non-adjacent cells, however, the last cell selected is the active cell.
- Any selection of cells stays selected until you click anywhere in the worksheet with the mouse, or press one of the arrow (←→↑↓) keys.

Selecting a Single Cell

To select a single cell:

- Use the arrow (←→↑↓) keys to move the selection highlight to the required cell.

or:

- Click the cell.

Selecting a Range of Cells

There are several methods of selecting a range of cells. Some methods work well for a small block of cells, others are more useful for large blocks of cells, for which you may need to scroll the worksheet.

To select small blocks of cells:

- Select a cell in one corner of the desired range, then hold down the **[Shift]** key and extend the selection using the **←→↑↓** keys.

or:

- Drag the mouse over the range.

To select larger blocks of cells:

- Select a cell in one corner of the desired range, scroll the worksheet to show the diagonally opposite corner of the range, then hold down the **[Shift]** key and click the cell that is in the opposite corner.

or:

- Choose the **Edit | Go To** command, type in the range reference, e.g. **A3:K50**, then press **[Enter]**.

Important Point

- If you select cells by dragging or using the **[Shift]** key, the cell you start with will be the active cell. As you drag the mouse over the selection, or extend the selection with the **←→↑↓** keys, the Name box displays the number of rows and columns currently selected.

Selecting an Entire Row or Column

To select an entire row:



- Click the row heading, the grey area containing the row number immediately to the left of the row — the mouse pointer will change to a right-pointing arrow when you are in the correct position.

or:

- Click any cell in the desired row and then press **[Shift]+[Space]**.

To select an entire column:



- Click the column heading, the grey area containing the column letter immediately above the column — the mouse pointer will change to a down arrow when you are in the correct position.

or:

- Click any cell in the desired column and then press **[Ctrl]+[Space]**.

Selecting Adjacent Rows or Columns

To select adjacent rows or columns:

- Select the first row or column then hold down the **[Shift]** key and use the arrow keys (**←→↑↓**) to extend the selection.

or:

- Drag the mouse over the required row or column headings.

or:

- Select the first row or column then hold down the **[Shift]** key and click the last row or column heading.

Selecting Non-Adjacent Cells and Cell Ranges

To select non-adjacent cells or cell ranges using the keyboard:

- Select the first cell.
- Press **[Shift]+[F8]**, use the arrow keys to move to the first cell of the new range, then hold down the **[Shift]** key and move to the last cell of the new range.

To select non-adjacent cells using the mouse:

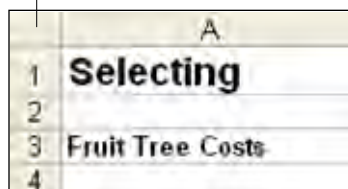
- Select the first cell.
- Hold down the **[Ctrl]** key and add other cells to the selection by clicking them, dragging the mouse over them, or clicking row or column headings.

Selecting an Entire Worksheet

To select an entire worksheet:

- Click the Select All button.

The Select All button



or:

- Press **[Ctrl]+A**.

10. Printing Workbooks - Notes

This chapter covers the following topics:

- Printing Workbooks
- The Print Dialog Box
- Print Preview
- Print Preview Features

Printing Workbooks

When you want to print a workbook, or worksheet, you can select to print one copy of the whole current worksheet using the current printer, or open the Print dialog box from which you can control the printout.

To simply print one copy of the current worksheet using the current printer:



- Click the Print button.

To display the Print dialog box:

- Choose the **File | Print** command.

or:

- Press **[Ctrl]+P**.

The Print Dialog Box

Once the Print dialog box is open, you can select various options. The most important options are:

- The printer shown in the **Name** box — if you have more than one printer available, you will be able to open the **Name** list box and select which printer you want to use.
- The **Print range** group of options — this is set to **All** by default and prints the whole of the current worksheet, but you can also select a range of pages in the **Pages From** and **To** boxes.
- The **Print what** group of options — this is set to **Active sheet(s)** by default and prints just the current worksheet — **Entire workbook** would print all the worksheets in the workbook and **Selection** prints the currently highlighted selection only.
- The **Number of copies** option — this controls how many copies to print.

Print Preview

Print Preview allows you to see your workbook on screen exactly as it will be printed.

To see the Print Preview:

- Choose the **File | Print Preview** command.

or:



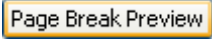
- Click the Print Preview button.

To close the Print Preview:

- In the Print Preview toolbar, click Close.

Print Preview Features

There are many things you can do in Print Preview:

Button	Feature
	Click Next to show the next page — you can also press [Page Down] .
	Click Previous to show the previous page — you can also press [Page Up] .
	Click Zoom to switch between a full-page view of a sheet and a magnified view.
	Click Print to open the Print dialog box.
	Click Setup to open the Page Setup dialog box.
	Click Margins to show and hide the margin markers — you can drag these around in Print Preview to change the margin settings — it can be a useful way of fitting slightly more on a page.
	Click Page Break Preview to switch to Page Break Preview, which shows page breaks as thick blue lines, which you can drag around to change where page breaks will occur.
	Click Close to close the Print Preview.
	The Help button opens the Help window.

11. Simple Formulas and Functions - Notes

This chapter covers the following topics:

- About Formulas and Functions
- Entering a Formula

About Formulas and Functions

Formulas and functions are what make spreadsheets useful enabling you to perform tasks such as adding up, calculating averages and working out V.A.T. Functions are built-in formulas that can be used for more complex calculations.

- When entering formulas and functions, you use **references** to the values in other cells. You do this using the row number and column letter of the cell you want to refer to. A very simple formula might be **=C7+D7**. This formula adds together the values in cells **C7** and **D7**, and displays the answer in the cell in which you enter the formula.

Entering a Formula

To enter a formula:

- Type **=** to tell Excel that you are going to enter a formula.
- Enter the formula, either by typing it all, or using the **←→↑↓** keys or the mouse to point to the cells you want to include.
- Press **[Enter]** to confirm the formula.

Useful Tips

- You can enter the column references in upper or lower case — if you type **c7**, Excel will change it to **C7**.
- You can add spaces to your formulas to make them easier to read, but you must not put a space before the **=** sign — if you do, Excel will not recognise what you type as a formula.

12. Spreadsheet Maths - Notes

This chapter covers the following topics:

- About Spreadsheet Maths
- Terminology
- Order of Evaluation for Formulas
- Tips for Working with Formulas

About Spreadsheet Maths

Excel has strict rules about how it evaluates formulas. You need to understand these rules; otherwise your worksheets may not give the results you expect.

Terminology

Excel uses the following terminology:

* denotes multiplication.

/ denotes division.

^ denotes exponentiation.

Important Points

- You may be used to a different term for exponentiation — the following all mean the same thing:

2³

2 cubed

2 to the power of 3

2^3

2*2*2

- The notation **2^3** is used in Excel.

Order of Evaluation for Formulas

Excel evaluates formulas in the following order:

Priority	Symbol	Operation
Worked out first	()	Anything enclosed in brackets
	^	Exponentiation
	* /	Multiplication, division
Worked out last	+ -	Addition, subtraction

- This means that in the formula **2+3*4**, Excel will multiply the **3** and **4** together first, because multiplication is higher priority than addition, and then add the **2**. In the formula **(2+3)*4**, the **2** and **3** will be added together first, because they are enclosed in brackets, and then multiplied by the **4**. If there are nested brackets — such as **2+(2*(3+4))** — the formula in the innermost brackets is worked out first.

Tips for Working with Formulas

Excel allows you to use formulas of great complexity. However, the more complicated you make your formulas, the more likely you are to make mistakes, and the harder it will be to spot them. If you have a complex formula, split it up into several smaller formulas, entering each one in a separate cell. These simple formulas will be easier to create, and easier to understand if you need to make changes to the worksheet.

- It's also a good idea to make an estimate of the result you expect from a formula. For instance, if you have a formula that adds V.A.T. to a total, look at the result and see if it's much more or much less than you expect.

13. Editing Formulas - Notes

This chapter covers the following topics:

- The Formula Bar
- Editing Formulas
- Changing Cell References

The Formula Bar

The Formula bar is the area above the column headings. When you are editing formulas, it is often easier to make changes in the Formula bar. If you click the Formula bar, two new buttons — Cancel and Enter — appear.

If you select a cell containing a formula and then click in the Formula bar, two things happen:



- Two buttons — the Cancel button and the Enter button — are displayed to the left of the Formula bar.
- Cell references in the formula are shown in different colours, and the corresponding cells are outlined in matching colours.

Important Point

- The picture shows a worksheet in which cell **D2** contains the formula **=B2+C2**.

	SUM ▾ ✕ ✓ fx =B2+C2				
	A	B	C	D	E
1					
2		23	34	=B2+C2	
3					

Editing Formulas

To edit a formula:

- Select the cell containing the formula.
- To edit the formula in the Formula bar, click the Formula bar; to edit the formula in the cell, press the **[F2]** key or double-click the cell.
- Edit the formula using the normal editing keys — **[Delete]**, **[Backspace]**, **←→↑↓**, etc.
- To confirm the changes to the formula, click the Enter button, or press **[Enter]**.
- To leave the formula unchanged, click the Cancel button, or press **[Esc]**.



Changing Cell References

To change cell references when editing formulas:

- Edit them using the normal editing keys.

or:

- Drag the coloured outline to move it to a different cell, or drag one of the handles at the corner of the cell to resize the reference.

14. Decimal Places - Notes

This chapter covers the following topics:

- About Decimal Places
- Increasing and Decreasing the Number of Decimal Places Displayed
- Setting the Number of Decimal Places Using the Format Cells Dialog Box

About Decimal Places

The number of decimal places shown by Excel varies — it depends on the column width, the number format and the number of decimal places you type. You can easily change it to suit your worksheet.

Increasing and Decreasing the Number of Decimal Places Displayed

To increase or decrease the number of decimal places displayed:



- Click the Increase Decimal or Decrease Decimal button.

or:

- Use the **Decimal places** option in the **Number** tab of the Format Cells dialog box.

Setting the Number of Decimal Places Using the Format Cells Dialog Box

You can use the **Number** tab of the Format Cells dialog box to select exactly how many decimal places are displayed.

To set the number of decimal places using the Format Cells dialog box:

- Choose the **Format | Cells** command, or right-click the selection and choose **Format Cells**, or press **[Ctrl]+1** to display the Format Cells dialog box.
- If necessary, click the **Number** tab.
- If necessary, select a **Category** for which decimal places are appropriate — the possible choices are **Number**, **Currency**, **Accounting**, **Percentage** and **Scientific**.
- Change the **Decimal places** box to the required value.

15. The Currency Format - Notes

This chapter covers the following topics:

- About the Currency Format
- Applying the Currency Format
- Applying the Currency Format When You Enter a Value
- Applying the Currency Format Using the Format Cells Dialog Box

About the Currency Format

The currency format automatically puts a £ sign in front of a cell value, puts in commas to separate the thousands, and displays the figures to two decimal places. If necessary, Excel will also widen the column to fit the newly formatted cell entry.

Applying the Currency Format

To apply the currency format:



- Click the Currency Format button.
or:
■ Apply the format when you enter a value.
or:
■ Use the **Currency** option in the **Number** tab of the Format Cells dialog box.

Applying the Currency Format When You Enter a Value

To apply the currency format when you enter a value:

- Type a £ sign before entering the value.

Applying the Currency Format Using the Format Cells Dialog Box

You can use the **Number** tab of the Format Cells dialog box to apply the currency format.

To apply the currency format using the Format Cells dialog box:

- Choose the **Format | Cells** command, or right-click the selection and choose **Format Cells**, or press **[Ctrl]+1** to display the Format Cells dialog box.
- If necessary, click the **Number** tab.
- In the **Category** list, select **Currency**.

16. Number Categories - Notes

This chapter covers the following topics:

- Number Categories in Excel
- Negative Number Formats
- Applying Number Categories
- Applying a Number Category Using the Format Cells Dialog Box

Number Categories in Excel

Excel provides the categories of numbers described in the next table.

Number category	Examples	Comments
Number	123 123.45	Default number format, suitable for many purposes. By default, displays an integer unless there are digits after the decimal point.
Currency	£69.00 £1,369.45	Automatically displays two decimal places unless you select otherwise. The £ sign is placed immediately to the left of the figures and commas are used to separate the thousands. In the UK the default currency symbol is the £ sign, but you can select any other currency symbol such as \$ or €.
Accounting	£ 69.00 £ 1,369.45	Similar to Currency format, except the £ symbol is displayed at the left side of the cell.
Percentage	12%	Values are displayed with a % sign.
Date	Mar-05 01/03/05 1 March 2005	Dates can be displayed in a wide range of built-in and custom formats (many more than are shown here). You can do arithmetic on dates, such as subtracting one date from another to calculate the number of days between the dates.
Time	23:45 23:45:00 11:45 PM	Again, a wide range of formats is possible, and you can do arithmetic on the times. You can also combine date and time in a single cell to produce values such as "1 March 1998 23:45".
Fraction	1/3 47/100	Displays numbers as fractions. A choice of formats is available — Excel will round numbers to the closest fraction in the format you select.
Scientific	1.23E+45	Used for very large or very small numbers. Excel uses this format by default for numbers greater than 99,999,999,999 or less than 0.000000001 (that is, for numbers with exponents greater than 10 or less than -10). Excel will also switch to this format where the column is too narrow for other formats — widening the column may be a quick way of getting numbers displayed in the format you were expecting.

Negative Number Formats

For the number and currency categories, you can select from between three formats for negative numbers:

-1234	The number is shown with a leading minus sign immediately to the left of the first digit.
1234	The number is shown in red without a minus sign.
-1234	The number is shown in red and with a leading minus sign immediately to the left of the first digit.

Applying Number Categories

There are three ways in which number categories can be applied:

- Using toolbar buttons — you may have used these for categories such as currency or percentage; only a few categories are available this way.
- As you type — Excel automatically applies the category if you type a number in the appropriate format.
- Using the **Numbers** tab of the Format Cells dialog box — this can be used for all categories.

Applying a Number Category Using the Format Cells Dialog Box

To apply a number category using the **Number** tab of the Format Cells dialog box:

- Choose the **Format | Cells** command, or right-click the selection and choose **Format Cells**, or press **[Ctrl]+1** to display the Format Cells dialog box.
- If necessary, click the **Number** tab.
- In the **Category** list, select the required category.
- If necessary, select a format appropriate to the category.

17. AutoSum - Notes

This chapter covers the following topics:

- What Is AutoSum?
- Using AutoSum
- Adding the Numbers in a Selected Range
- Entering a SUM Formula in a Selected Cell

What Is AutoSum?



The AutoSum button provides a quick way of entering the SUM function, without having to type the function name or the range of cells you want to add together.

- You will probably use AutoSum most frequently for summing figures in a row or a column. However, it will work just as well with figures from a completely different part of the worksheet, a different worksheet in the same workbook, or even a completely different workbook.
- This chapter is only about using the AutoSum button to create a formula that uses the SUM function.

Using AutoSum

There are two ways of using the AutoSum button:

- To add the numbers in a selected range.
- To insert a formula that uses the SUM function in a selected cell — Excel will suggest a cell range which you can accept or modify.

Adding the Numbers in a Selected Range

To enter a formula to add the numbers in a single row or column:

- Select the cells to be added together.



- Click the AutoSum button — Excel will insert a formula to add the numbers in the selected range in the cell below the selected column of numbers, or to the right of the selected row of numbers.

To enter separate formulas to add up the numbers in each column of a table:

- Select the table.



- Click the AutoSum button — Excel will insert a formula at the bottom of each column of the table to add together the numbers in that column.

Entering a SUM Formula in a Selected Cell

This method of using the AutoSum button takes a few more steps, but is much more flexible — you can select both the location of the formula, and the cell range to be added together.

To enter a SUM formula in a cell:



- Select the cell in which you want the SUM formula to appear.
- Click the AutoSum button — Excel will normally show a suggested cell range with a moving dotted outline.
- If the range suggested by Excel is not what you want, or if Excel does not suggest a range, modify the selected range — see below.
- Press **[Enter]**.

To modify the range selected by the AutoSum button:

- Type the range in the same way that you would when entering a formula.

or:

- Use the **←→↓↑** keys to move to one corner of the required range and then **[Shift]+←→↓↑** to move to the opposite corner of the required range.

or:

- Drag the outline of the suggested range and the resizing handles at the corners of the suggested range until the required range is selected — this can be quite fiddly.

or:

- Select the required range using the mouse in the normal way.

18. More AutoSum Functions - Notes

This chapter covers the following topics:

- The AutoSum Button
- Using the AutoSum Function with the Average, Count, Max and Min Functions

The AutoSum Button



If you click the down arrow next to the AutoSum button you are offered a choice of five functions:

- **Sum** adds up all the numbers in a range — this is the default function for the button.
- **Average** works out the average of all the numbers in a range.
- **Count** works out how many of the cells in a range contain values.
- **Max** finds the largest number in a range.
- **Min** finds the smallest number in a range.

Important Points

- **Sum** is always the default function for the AutoSum button. Unlike some other toolbar buttons with arrows, clicking the arrow and selecting a different function does not make that function the default when you click the main button. This chapter assumes that you know how to use the AutoSum button with the SUM function.
- You may be familiar with the **Count** option provided by the AutoCalculate feature. Rather confusingly, the **Count** option provided by the AutoSum button is equivalent to the **Count Nums** option in the AutoCalculate feature.

Using the AutoSum Function with the Average, Count, Max and Min Functions

To enter a formula using one of these functions in a cell:



- Select the cell in which you want the formula to appear.
- Click the arrow on the AutoSum button and select the required function — Excel will normally show a suggested cell range with a moving dotted outline.
- If the range suggested by Excel is not what you want, or if Excel does not suggest a range, select the required range — see below.
- Press **[Enter]**.

To modify the range selected by the AutoSum button:

- Type the range in the same way that you would when entering a formula.

or:

- Use the  keys to move to one corner of the required range and then **[Shift]+** to move to the opposite corner of the required range.

or:

- Drag the outline of the suggested range and the resizing handles at the corners of the suggested range until the required range is selected — this can be quite fiddly.

or:

- Select the required range using the mouse in the normal way.

19. Copying and Moving Cells - Notes

This chapter covers the following topics:

- The Clipboard
- Copying Cells to the Clipboard
- Cutting Cells to the Clipboard
- Pasting Cells from the Clipboard
- Moving Cells Using the Clipboard
- Copying Cells Using the Clipboard

The Clipboard

Windows has a feature known as the **Clipboard**. This is a temporary storage place for information such as cell contents, text and pictures. It can be used to move items around within a workbook and between different workbooks.

There are three actions associated with the Clipboard:

- **Copy** makes a copy of the current selection on the Clipboard, leaving the original unchanged.
- **Cut** moves the current selection to the Clipboard and deletes the original.
- **Paste** copies the contents of the Clipboard to the currently selected location.

Important Points

- The selection you copy to the Clipboard can be any size — it will often be a single cell or a small range of cells, but single characters or entire worksheets can be copied in exactly the same way. It can also be a chart or a picture.
- The Clipboard is shared by all Windows applications, and only provides temporary storage for one item — anything there will be lost when you copy something else to the Clipboard or turn your computer off.
- The Clipboard can be used to copy or move cells on a worksheet or to a different worksheet or workbook. It can also be used to transfer values or tables of figures to other applications, such as Microsoft Word.
- If you do two Copy or Cut operations in succession, you may find that the Clipboard task pane is displayed in your Microsoft Excel window. This pane enables you to copy several items in succession, but is not dealt with here.

Copying Cells to the Clipboard

To copy selected cells to the Clipboard:

- Choose the **Edit | Copy** command.

or:

- Click the Copy button.

or:

- Right-click the selection and choose **Copy**.

or:

- Press **[Ctrl]+C**.



Important Points

- The cells you copy to the Clipboard will have a moving dotted line around them. This will remain until you start to edit a cell, press **[Esc]**, or use another Excel feature.
- To abandon a copy operation when you have a moving dotted line around the cell(s), press **[Esc]**.

Cutting Cells to the Clipboard

To cut selected cells to the Clipboard:

- Choose the **Edit | Cut** command.

or:

- Click the Cut button.

or:

- Right-click the selection and choose **Cut**.

or:

- Press **[Ctrl]+X**.



Important Points

- If you are familiar with the Clipboard in Word or most other Windows applications, you should note that there is an important difference about how it works in Excel. In Word, if you cut something to the Clipboard, it disappears from the workbook immediately. If you cut something in Excel, it is highlighted with a moving dotted line, but is not deleted until it has been pasted somewhere else. If you don't paste it somewhere else, it will remain in place in its original position.
- To abandon a cut operation when you have a moving dotted line around the cell(s), press **[Esc]**.
- Cut is applied to the cell contents and formatting, not the cell itself. You will not be left with a hole in your worksheet, nor will the other cells move around.

Pasting Cells from the Clipboard

To paste from the Clipboard:

- Choose the **Edit | Paste** command.

or:
- Click the Paste button.

or:
- Right-click the cell where you want to paste and choose **Paste**.

or:
- Press **[Ctrl]+V**.

or:
- Press **[Enter]**.



Important Points



- After you have pasted an item from the Clipboard, a Paste Options button may be displayed in the workbook. This allows you to select the formatting of the pasted item — this is not covered in this here.
- If you use **[Enter]** to paste the item from the Clipboard, the Clipboard will be cleared. However, if you use one of the other methods to paste an item from the Clipboard then it is not cleared. This means that you can paste the same item in several places by selecting each location in turn, then pasting the item. The item is available for pasting while there is a moving dotted line around the original cell(s).
- The above only applies for items copied to the clipboard, not items cut to the clipboard. As soon as you paste an item that is cut from the clipboard, the original item is no longer available.
- Paste will overwrite any existing cell contents and formatting. If you paste in the wrong place or overwrite cells you want to keep, use the Undo feature.

Moving Cells Using the Clipboard

To move cell contents using the Clipboard:



- Select the cell(s) you want to move.
- Cut the cell(s) to the Clipboard — click the Cut button, or press **[Ctrl]+X**.
- Select the destination cell(s) — if you are moving a range of cells, just select the top left-hand cell of the destination range.
- Paste the cell(s) from the Clipboard into the workbook — click the Paste button, or press **[Ctrl]+V** or **[Enter]**.



Important Points

- When you paste cells that have been cut to the Clipboard, the original cells are cleared.

Copying Cells Using the Clipboard

To copy a single cell or a range of cells using the clipboard:



- Select the cell(s) you want to copy.
- Copy cell(s) to the Clipboard — click the Copy button, or press **[Ctrl]+C**.
- Select the destination cell — if you are copying a range of cells, select just the top left-hand cell.
- Paste the cell(s) from the Clipboard into the workbook — click the Paste button, or press **[Ctrl]+V** or **[Enter]**.



To copy the same cell(s) to another location:

- Select the new destination cell.
- Paste from the Clipboard again.

20. Relative and Absolute References - Notes

This chapter covers the following topics:

- What Are Relative and Absolute References?
- Creating Relative and Absolute References
- Uses for Absolute References
- What Happens to References When You Edit a Worksheet
- Copying and Moving Formulas

What Are Relative and Absolute References?

In Excel, there are two different types of cell reference: **relative** and **absolute**. A relative reference tells Excel how to find the reference in relation to the cell containing the formula — if cell **A1** contains a relative reference to cell **A2**, Excel thinks of the reference as “the cell below this one”.

- When you copy a formula that contains relative references, the references are changed to reflect the new location. For example, if cell **A1** contains a reference to cell **A2**, and you copy cell **A1** to cell **C1**, **C1** will contain a reference to cell **C2**. The reference in cell **A1** is interpreted as meaning “the cell below this one”, and is reinterpreted as such when you copy it to cell **C1**.
- Absolute references are the opposite of relative references. They will always point to the same place, no matter where you copy them in your worksheet. Absolute references have \$ symbols before the column letter and row number — **\$B\$2** is the absolute reference for cell **B2**. You can select separately whether the column and the row parts of the reference are absolute — for instance, **B\$2** would be an absolute row reference but a relative column reference for cell **B2**.
- Don't worry if you are not confident that you understand what this all means. The exercises that accompany this chapter take you through some examples of relative and absolute references which should make things clearer.

Creating Relative and Absolute References

You have probably already used relative references in formulas — they are the type of reference that Excel uses when you select cell references for formulas by clicking with the mouse or pointing with **←→↓↑** keys. They are also easy to type into formulas, as you don't have to bother with the \$ symbols.

To create absolute references:

- Include \$ symbols in the cell reference as you type it in.
- or:
- Press the **[F4]** key to cycle through the different forms of absolute and relative references.

Important Point

- You can also use either of these methods when editing a formula to change a relative reference to an absolute reference, or vice versa.

Uses for Absolute References

As a general guide, you should use absolute references for references to specific cells that contain values that don't change very often, and are used in lots of different formulas — V.A.T. rates, discount rates and currency conversion rates are all good examples. You should use relative references for everything else.

- A typical example of using an absolute reference is setting up a value that you want to use throughout the worksheet, but may need to change at some point. It's quite common to see worksheets with a group of such values set up somewhere — usually at the top — so that they can easily be changed.

What Happens to References When You Edit a Worksheet

The distinction between absolute and relative references only really matters when you copy formulas. For most other changes, such as moving cells and inserting or deleting rows or columns, Excel will update references to try and make them point to the same worksheet data.

Copying and Moving Formulas

To copy a formula:



- Select the cell containing the formula.
- Click the Copy button, or press **[Ctrl]+C**.
- Select the destination cell.
- Click the Paste button, or press **[Ctrl]+V**.



To move a formula:



- Select the cell containing the formula.
- Click the Cut button, or press **[Ctrl]+X**.
- Select the destination cell.
- Click the Paste button, or press **[Ctrl]+V**, or press **[Enter]**.



21. Undo, Redo and Repeat - Notes

This chapter covers the following topics:

- Undoing Your Last Action
- Undoing More Than One Action
- Redoing Your Last Undo
- Redoing More Than One Action

Undoing Your Last Action

Almost inevitably, at some stage when you are editing a worksheet you will accidentally do something wrong. It may be deleting some cells, typing over the contents of an existing cell, or clicking the wrong button. You may also make some changes to your worksheet, and then decide that you preferred it the way it was before you made the changes. This is when you can use the **undo** feature.

To undo your last action:

- Choose the **Edit | Undo** command.

or:



- Click the Undo button — the blue circular arrow, not the black down arrow next to it.

or:

- Press **[Ctrl]+Z**.

Important Point

- The actual name of the **Edit | Undo** command and the ScreenTip for the Undo button will depend on your last action.

Undoing More Than One Action

You can repeatedly use any of the three ways of undoing your last action to undo a number of actions. However, if you click the black down arrow next to the Undo button, the Undo list is opened. This lists the changes you have made, starting with the most recent at the top of the list. You can select the change that you want to go back to.

Important Points

- You have to undo what you have done in reverse order — starting with the most recent.
- You cannot pick out individual changes — if you pick the fifth most recent change and undo it, all of your five most recent changes are undone.

Redoing Your Last Undo

The **redo** feature works in a similar way to the Undo feature. If you decide that you don't like the undos you have just done, you can change your mind and redo the changes.

To redo the last undo:

- Choose the **Edit | Redo** command.

or:

- Click the Redo button — the blue circular arrow not the black down arrow.

or:

- Press **[Ctrl]+Y**.



Redoing More Than One Action

You can repeatedly use any of the three ways of redoing your last undo to redo a number of actions. However, if you click the black down arrow next to the Redo button, the Redo list is opened. This lists the actions you can redo and allows you to redo a number of actions at the same time.

Important Points

- The changes are carried out in the reverse of the order in which you undid them.
- You cannot pick out an individual redo from the middle of the list and redo just that one action.

22. Inserting and Deleting Cells - Notes

This chapter covers the following topics:

- Inserting Cells
- Deleting Cells

Inserting Cells

You can insert cells anywhere in your worksheet — this can be useful for making space for extra values in a table. When you insert cells, existing cells are moved out of the way, either to the right or downwards.

To insert cells:

- Select a range of cells that is the same size as the range that you want to insert — this can be any size from a single cell to a large block of cells.
- Choose the **Insert | Cells** command, or right-click the selection and choose **Insert**, or press **[Ctrl]+[+]**, to display the Insert dialog box.
- In the **Insert** group of options select **Shift cells right** to move existing cells to the right, or **Shift cells down** to move existing cells down.
- Click **OK**, or press **[Enter]**.

Deleting Cells

Deleting cells is different from clearing cells. When you **delete** cells, they are removed from the worksheet completely, and existing cells are moved in from below or to the right of the deleted cells to fill the gap. When you **clear** cells, you just remove the cell contents — text, values or formulas — with no effect on surrounding cells.

In Excel the **[Delete]** key does not delete, it clears.

To delete selected cells:

- Choose the **Edit | Delete** command, or right-click the cell(s) and choose **Delete**, or press **[Ctrl]+[-]**, to display the Delete dialog box.
- In the **Delete** group of options select **Shift cells left** to move existing cells to the left, or **Shift cells up** to move existing cells up.
- Click **OK**, or press **[Enter]**.

23. Inserting and Deleting Rows and Columns - Notes

This chapter covers the following topics:

- Inserting a Row or Column
- Inserting a Single Row
- Inserting a Single Column
- Inserting Several Rows or Columns
- Deleting Rows or Columns

Inserting a Row or Column

You can insert rows or columns anywhere in your worksheet. When you insert a row, existing rows are moved down to make room for the new row. When you insert a column, existing columns are moved to the right.

Inserting a Single Row

To insert a row:

- Select a cell in the row immediately below where you want the new row to appear, then choose the **Insert | Rows** command.

or:

- Right-click the row header of the row immediately below where you want the new row to appear, then choose **Insert** from the shortcut menu.

or:

- Select the row immediately below where you want the new row to appear, then press **[Ctrl]+[+]**.

Inserting a Single Column

To insert a column:

- Select a cell in the column immediately to the right of where you want the new column to appear, then choose the **Insert | Columns** command.

or:

- Right-click the column header in the column immediately to the right of where you want the new column to appear, then choose **Insert** from the shortcut menu.

or:

- Select the column immediately to the right of where you want the new column to appear, then press **[Ctrl]+[+]**.

Inserting Several Rows or Columns

Inserting several rows or columns is very similar to inserting one row or column. The only difference is that you must first select more than one row or column.

To insert several rows or columns:

- If inserting rows, select the number of rows that you want to insert. The first row of your selection should be the row immediately below where you want the new rows to appear.
- If inserting columns, select the number of columns that you want to insert. The first column of your selection should be the column immediately to the right of where you want the new columns to appear.
- Choose the **Insert | Rows** or **Insert | Columns** command, or right-click the selection and choose **Insert**, or press **[Ctrl]+[+]**.

Deleting Rows or Columns

To delete entire rows or columns:

- Select the row(s) or the column(s) that you want to delete.
- Choose the **Edit | Delete** command, or right-click the selection and choose **Delete**, or press **[Ctrl]+[-]**.

24. Changing Column Width and Row Height - Notes

This chapter covers the following topics:

- Changing Column Width
- Manually Adjusting Column Width
- Using AutoFit to Change the Column Width
- Changing Row Heights
- Manually Changing Row Height
- Using AutoFit to Change Row Height

Changing Column Width

There are two methods of changing column width:

- Manually — you set the column width to a selected value.
- AutoFit — Excel automatically adjusts the width to the widest entry in the column or selection.

Important Points

- For either method, if you want the change to apply to more than one column, you should select the columns first.
- You can also change the default column width for the whole worksheet.

Manually Adjusting Column Width

To manually adjust the column width:

- Choose the **Format | Column | Width** command, then enter the desired value in the Column Width dialog box.

or:

- Drag the right-hand edge of the column heading to the desired position.

or:

- Right-click the column heading and choose **Column Width**, then enter the desired value in the Column Width dialog box.

Using AutoFit to Change the Column Width

AutoFit can be used to adjust the column width to suit either the values in selected cells, or the whole column.

To use AutoFit to adjust column width:

- Choose the **Format | Column | AutoFit Selection** command — this method can be used to AutoFit selected cells or the entire column.

or:

- Double-click the right-hand border of the column heading — this method always AutoFits the entire column.

Changing Row Heights

Row height can be adjusted using similar methods to those for changing column widths. However, you will not need to do this very often, as the row height automatically adjusts to suit the cell contents and formatting. You may find it useful for spreading tables out.

Manually Changing Row Height

To manually adjust the row height:

- Choose the **Format | Row | Height** command, then enter the desired value in the Row Height dialog box.

or:

- Drag the bottom edge of the row heading to the desired position.

or:

- Right-click the row heading and choose **Row Height**, then enter the desired value in the Row Height dialog box.

Important Point

- The number you enter in the **Row height** box is the height in points. The larger the number you enter, the larger the height of the row.

Using AutoFit to Change Row Height

If you make manual adjustments to row height, and later decide to change back to the usual automatic height, you can use AutoFit.

To use AutoFit to change the row height:

- Point to the bottom edge of the row heading and double-click — this method AutoFits the entire row.

or:

- Select one or more cells in the row, or the entire row, then choose the **Format | Row | AutoFit** command — this method can be used for selected cells or entire rows.

Important Point

- You can AutoFit several rows at once by selecting a range of cells or rows.

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