

## CHAPTER 1

## InFocus

ITU202\_E801

# GETTING TO KNOW MICROSOFT EXCEL

**Microsoft Excel** is a *spreadsheet* application that is usually part of a suite of Microsoft applications, known as **Microsoft Office**.

You can use Excel for all sorts of tasks involving numbers such as budgeting, sales analysis, forecasting, charting and graphing and much more. Excel is a tool used to perform calculations with numbers so virtually any task that requires calculation and number crunching can be setup and performed in Excel.

Before you leap into creating anything, it is worth taking some time to become familiar with the Excel environment and its features.

**In this session you will:**

- ✓ learn how to start **Microsoft Excel 2010**
- ✓ gain an understanding of the **Microsoft Excel 2010** screen
- ✓ gain an understanding of how **Microsoft Excel 2010** works
- ✓ learn how to use the **Ribbon**
- ✓ learn how to use the keytip badges on the **Ribbon**
- ✓ gain an understanding of **Backstage View** in **Microsoft Excel**
- ✓ learn how to use shortcut menus
- ✓ gain an understanding of how dialog boxes work
- ✓ gain an understanding of the **Quick Access Toolbar**
- ✓ gain an understanding of the status bar
- ✓ learn how to exit correctly and safely from **Microsoft Excel 2010**.

# STARTING MICROSOFT EXCEL

To create a new spreadsheet, or edit an existing one, the first thing that you need to do is to start **Microsoft Excel**. As a standard software application, how **Microsoft Excel** is started is

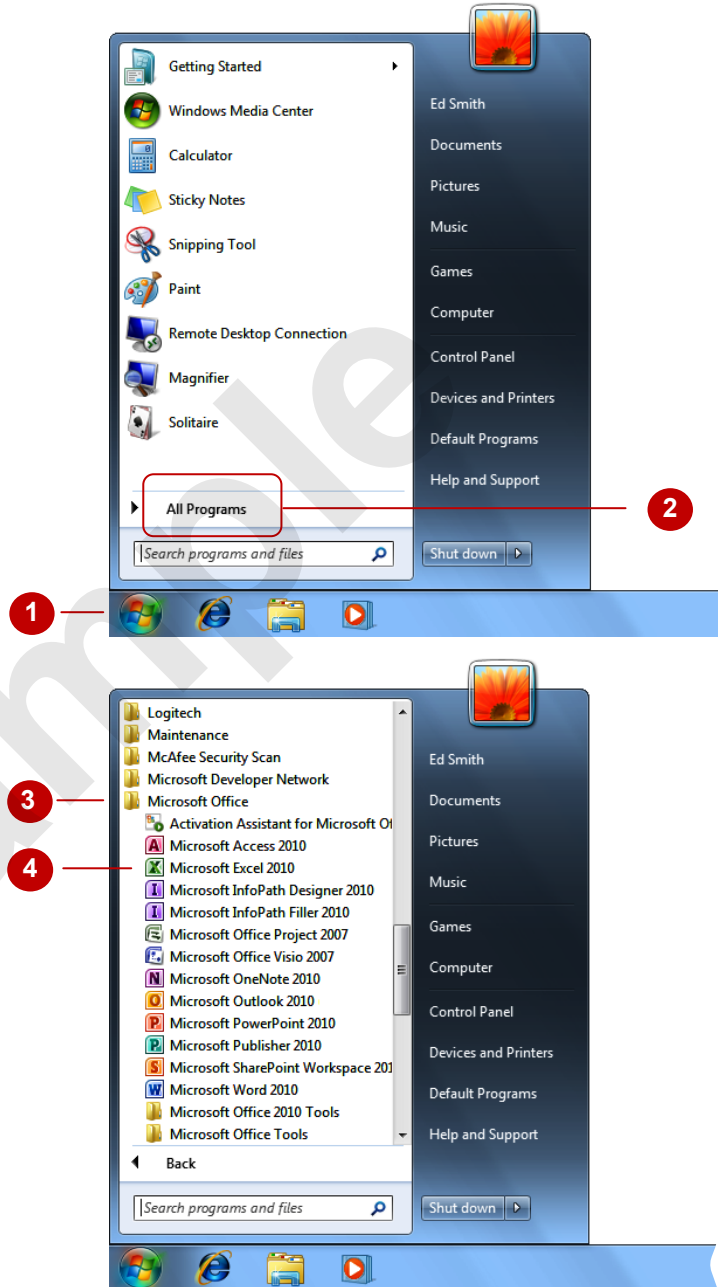
largely determined by Windows. For example, it can be started from the Windows **Start menu**, from a **shortcut**, or even by opening a workbook (project) that was created previously in Excel.

## Try This Yourself:

*Before you begin, ensure that your computer is switched on and that the Windows desktop is displayed on your screen...*

- 1 Click on the Windows **Start** button (it's a round button with a Windows logo on it) at the bottom left-hand corner of the screen to display the menu
- 2 Click on **All Programs**
- 3 Click on **Microsoft Office**
- 4 Click on **Microsoft Excel 2010**

*After a few moments of huffing and puffing Excel will start with a blank "workbook" on the screen – the workbook appears like an electronic sheet of paper ruled into columns and rows.*



## For Your Reference...

To **start Microsoft Excel**:

1. Click on the Windows **Start** button
2. Click on **All Programs**
3. Click on **Microsoft Office**
4. Click on **Microsoft Excel 2010**

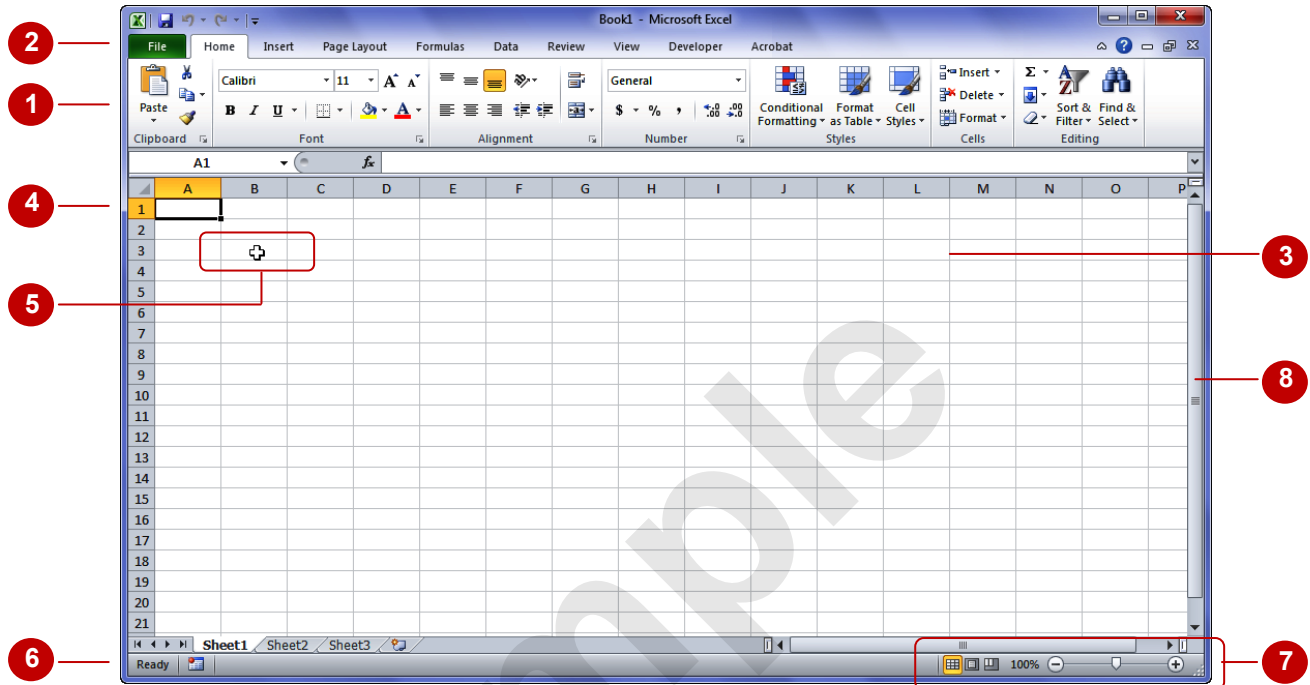
## Handy to Know...

- If you have accessed Microsoft Excel several times it should appear in the first part of the **Start** menu – this means you won't need to continue to the **All Programs** menu.

# THE EXCEL 2010 SCREEN

The Microsoft Excel 2010 screen is made up of several key elements. Some of these, such as the **Ribbon** and the **Backstage**, are common to other Office 2010 applications so once you know

how they work you won't have to relearn them when you use other applications. The unique aspect of Excel is the **worksheet** where you enter and work with your data.



- 1 The **Ribbon** is the tabbed band that appears across the top of the window. It is the command control centre of Excel 2010. You use the **tabs** on the Ribbon to access **commands** which have been categorised into **groups**. Commands can be buttons or sometimes include **galleries** of formatting options that you can select from.
- 2 The **File** tab is used to access the **Backstage** view which contains file management functions such as saving, opening, closing, printing, sharing, etc. *Excel Options* are also available so that you can set your working preferences and options for Excel 2010.
- 3 The **Worksheet** is like an electronic piece of paper ruled into columns and rows. The worksheet is where you type numbers, letters, and formulas to perform calculations. Notice that columns are headed using letters of the alphabet (A, B, C, etc) while rows are designated using numbers down the left side.
- 4 The **Active Cell** is where text, numbers, and formulas will appear when you start typing.
- 5 The **Mouse Pointer** is used, amongst other things, to select a cell and make it active. It may appear as a large cross, as in this example, as an I-bar, or any number of other forms, depending upon its function at that position on the screen.
- 6 The **Status Bar** appears across the bottom of the window and displays useful information about what is happening in the worksheet. At present it shows **Ready** which means that Excel is ready to be used for your project.
- 7 The **View** buttons and the **Zoom Slider** are used to change the view or to increase/decrease the zoom ratio for your worksheet.
- 8 The **Scroll bar** indicates your current position in the worksheet and lets you move to other positions in the worksheet by clicking or dragging. The arrows can also be used to move through the worksheet.

# HOW MICROSOFT EXCEL 2010 WORKS

For a novice user the Microsoft Excel 2010 screen can seem intimidating. You'll soon see that it is made up of only three key areas. The data you type is placed on a **worksheet**. The

data within the worksheet can be manipulated and changed using commands on the **Ribbon**. The worksheet is part of a larger entity known as a workbook which is controlled on the **Backstage**.

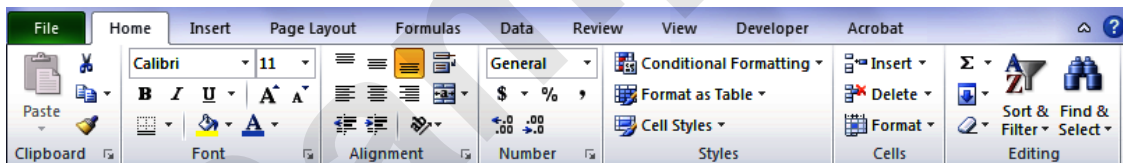
## 1 The Worksheet

A worksheet appears as a number of rows and columns which form squares known as **cells**. Everything you type in Excel is entered into these cells. In the simple business plan shown here there are *numbers* and *words* entered into a worksheet. *Formulas* are also entered that automatically perform calculations. The worksheet is part of a larger entity known as a **workbook** – workbooks can be filed away for future use or for sharing and can also be printed.

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Income</b>					
Sales	4,000	4,230	5,000	5,500	6,100
Royalties	1,200	1,200	1,200	1,200	1,200
Grants	5,500	6,000	3,000	4,000	4,500
<b>Total Income</b>	<b>10,700</b>	<b>11,430</b>	<b>9,200</b>	<b>10,700</b>	<b>11,800</b>
<b>Expenses</b>					
Office	250	280	300	320	360
Travel	6,200	5,800	6,100	7,000	5,200
Sundries	100	150	200	240	300
<b>Total Expenses</b>	<b>6,550</b>	<b>6,230</b>	<b>6,600</b>	<b>7,560</b>	<b>5,860</b>
<b>Profit</b>	<b>4,150</b>	<b>5,200</b>	<b>2,600</b>	<b>3,140</b>	<b>5,940</b>

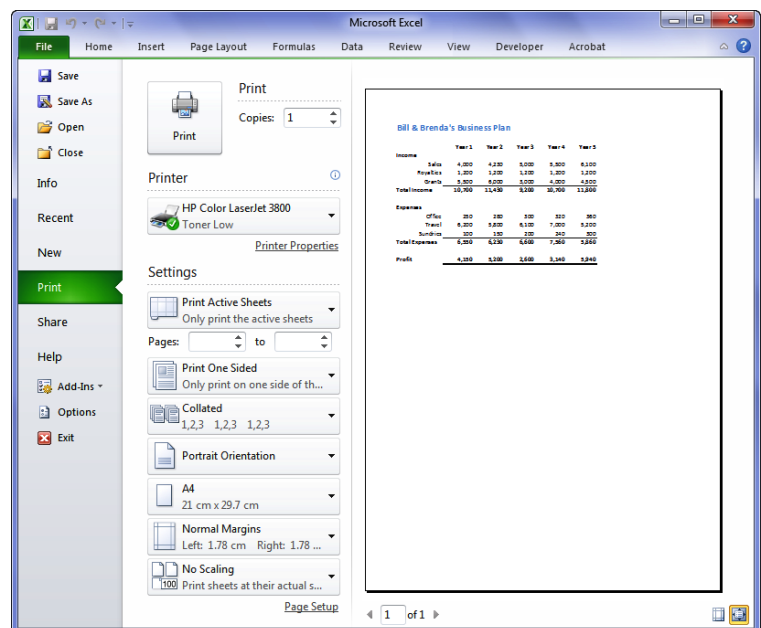
## 2 The Ribbon

When you need to do something with the data on a worksheet, such as format it, colour it, analyse it, move it, copy it, and much more, you'll find all of the relevant commands on the **Ribbon**. The **Ribbon** has commands organised thematically using a series of tabs across the top.



## 3 Backstage

When you want to do something with the data in your worksheet, such as save it so that you can access it again later, print it, share it with a colleague, send it to your boss, protect it from prying eyes, or whatever, you will need to access the **Microsoft Office Backstage** area of Microsoft Excel. The **Backstage** is accessed using the **File** tab on the **Ribbon**. Rather than offering you commands on a **Ribbon**, **Backstage** occupies the entire screen and has a series of options down the left side. Here the **Print** option is active, and that is why you can see a preview of the worksheet and a series of print-related options on the right side of the **Backstage**.



# USING THE RIBBON

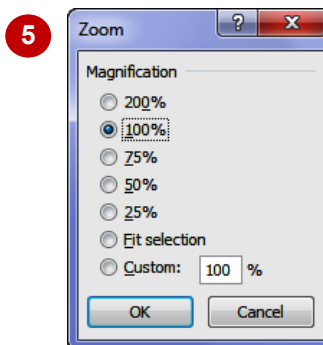
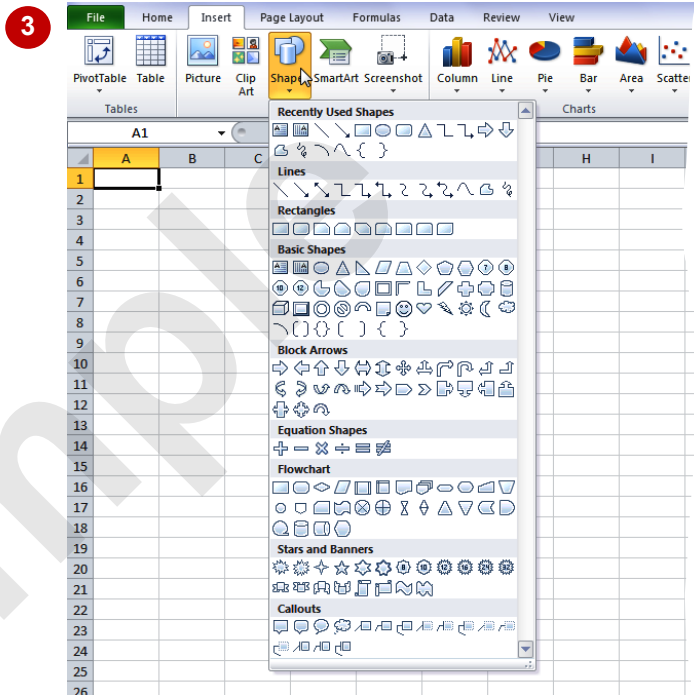
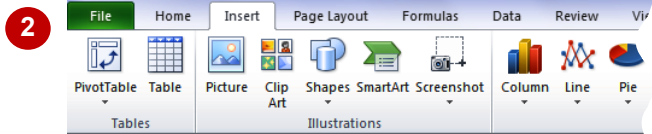
The **Ribbon** is the command centre for Microsoft Excel. It provides a series of **commands** organised into **groups** and placed on relevant **tabs**. Tabs are activated by clicking on their

name to display the command groups. **Commands** are activated by clicking on a button, tool or gallery option. Everything you could possibly want to do in Excel will be found somewhere on this **Ribbon**.

## Try This Yourself:

*Before trying this ensure that Microsoft Excel 2010 has started...*

- 1 Examine the **groups** on the **Home** tab  
*These are the most commonly used commands, including copy and paste, font and number formatting, styles and editing...*
- 2 Click on the **Insert** tab  
*The commands on this tab are used to create tables, illustrations, charts, headers and footers, text objects and symbols...*
- 3 Click on **Shapes** in the **Illustrations** group to display the **Shapes** gallery  
*A huge range of shapes will appear which can be inserted into the worksheet...*
- 4 Click on some of the other **tabs** across the top of the **Ribbon** (**Page Layout**, **Formulas**, etc) and examine the commands on them  
*Some of these open "dialog boxes"...*
- 5 On the **View** tab, click on **Zoom** in the **Zoom** group to display the **Zoom** dialog box
- 6 Click on **[Cancel]** then click on the **Home** tab



*Dialog boxes like this one provide settings or options for you to choose from. For example in this one you can zoom the screen by varying percentages. We won't actually do anything at this point. You'll get plenty of opportunity for using dialog boxes at a later stage...*

## For Your Reference...

To **use** the **Ribbon**:

1. Click on a **tab** to display the commands
2. Click on a **button** to activate a **command**, display a **gallery**, or display a **dialog box**

## Handy to Know...

- Additional tabs known as **Contextual tabs** appear in specific circumstances. For example, if you insert a picture, the **Picture Tools: Format** tab will appear. This provides quick access to all of the tools you may need to modify and work with the picture.

# USING RIBBON KEY TIPS

The **Ribbon** is normally accessed with a mouse. However you can also use the keyboard to access **Ribbon** commands. When you press the **Alt** key on the keyboard alphabetical labels,

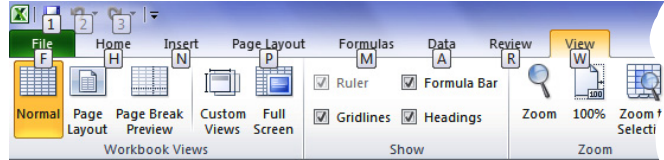
known as **key tip badges**, appear on the **Ribbon**. Pressing a key on the keyboard will activate the corresponding command on the **Ribbon** just as if you'd clicked the command with the mouse.

## Try This Yourself:

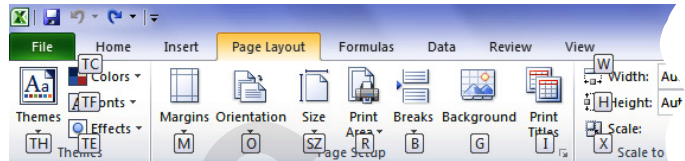
*Before trying this ensure that Microsoft Excel 2010 has started...*

- 1 Press **Alt** to display the key tip badges for the tabs
- 2 Press **P** to display the **Page Layout** tab and to see the key tip badges for these commands
- 3 Press **M** to display the **Margins** options  
*Here you could use the **↑** or **↓** keys to move through the options, or **A** to see Custom Margins...*
- 4 Press **Esc** twice to return to the **Tab** level of key tips
- 5 Press **M** to access the **Formulas** tab
- 6 Press **Tab** five times and notice that **Logical** is selected
- 7 Press **Enter** to see a list of **Logical** functions, then press **↓** several times to move down the menu
- 8 Press **Esc** to abort the operation

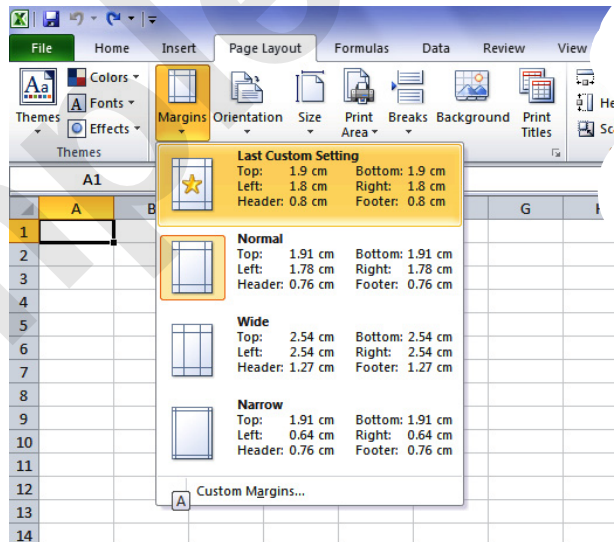
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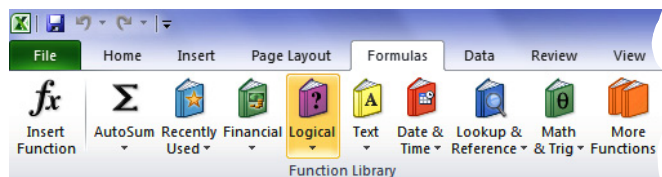
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## For Your Reference...

To **use KeyTip Badges** to access commands:

1. Press **Alt** to display the **KeyTip Badges**
2. Press the letter key of the command or tab that you want to select

## Handy to Know...

- You can still use the **shortcut keys** for menu commands that were available in previous versions of Office. For example, **Ctrl + B** applies bold to selected text.

# UNDERSTANDING THE BACKSTAGE VIEW

The **Ribbon** allows you work on the content in a worksheet – you can add more content, colour it, chart it, analyse it, copy it, and much more. The **Backstage**, which is accessed using the **File** tab,

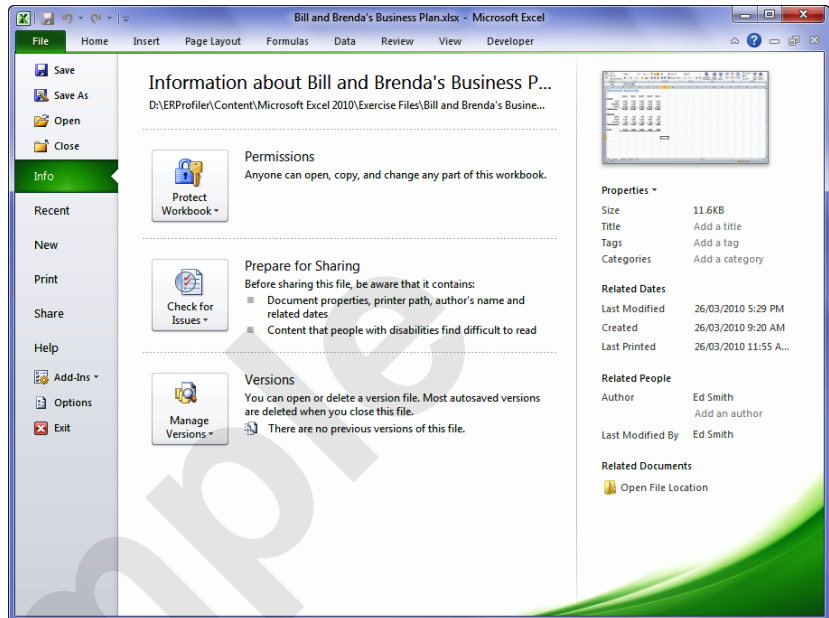
allows you to do something with the content you create. You can save it for reuse later, print it on paper, send it via email, and more using the options found in **Backstage** view.

## The Backstage Screen

The **File** tab on the **Ribbon** is not a normal tab – as you can tell by the fact that it is coloured. Clicking on the **File** tab launches a mini-program within Microsoft Excel known as **Backstage View**. **Backstage**, as it's known for short, occupies the entire screen although the tabs from the **Ribbon** still remain visible at the top.

At the left of the **Backstage** is a navigation pane which is made up of **Quick commands**, smallish buttons which will perform an operation immediately, and largish **tabs** which display more options and information to the right of the screen.

The whole underlying purpose of the **Backstage** is to allow you to protect your data, to share it with others, and to provide you with valuable information both about your data and the status of Microsoft Excel.



## Quick Commands

The **Quick commands** provide immediate access to an operation.

	Saves the current workbook
	Allows you to save the current workbook under a different name or location
	Opens a previously saved workbook
	Closes the current workbook
	Provides access to supplementary programs
	Provides access to options that allow you to control how Excel looks and works
	Allows you to close and exit from Microsoft Excel

## Backstage Tabs

The **Backstage tabs** provide more options for working with a workbook

	Provides status information about the current workbook, and allows you to manage versions and permissions
	Provides a list of recently saved workbooks
	Allows you to create a new workbook and provides access to a huge gallery of templates
	Allows you to print the current workbook and also previews it
	Allows you to share your workbook with other people
	Provides access to Microsoft's help network and also provides licensing information about your software

# USING SHORT CUT MENUS

In addition to the **Ribbon**, Excel also features **shortcut menus** that appear when you right-click in an area on the screen or on an object. The content of the menu varies depending upon

where you click. **Shortcut menus** provide an alternative, usually a quick one, to trolling through the **Ribbon** to find a specific operation or command.

## Try This Yourself:

*Before trying this exercise ensure that Microsoft Excel 2010 has started...*

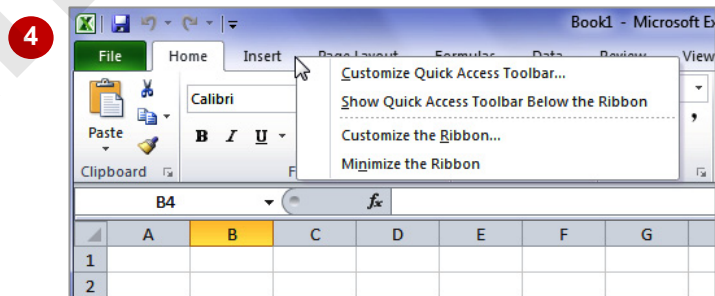
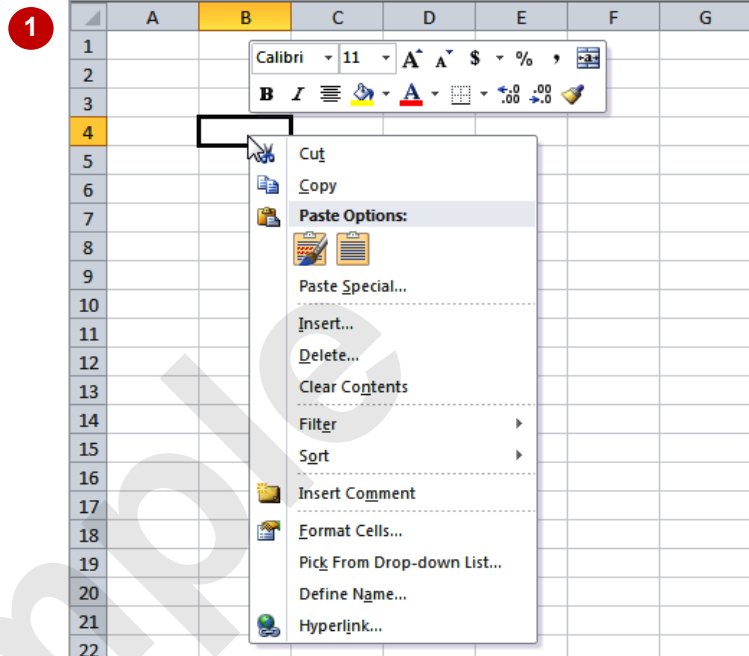
- 1 Click in cell **B4** (column B, row 4) in the worksheet and then click with the **right** mouse button to display a **shortcut** or **contextual menu**

*Because you have clicked in a worksheet cell the menu includes a number of options specific to what can be done in and with the cell...*

- 2 Click anywhere else on the worksheet with the **left** mouse button to close the shortcut menu
- 3 Move the mouse pointer over any of the **tabs** on the ribbon
- 4 **Right-click** on a **tab** to display a shortcut menu

*Notice how it differs from the previous menu and displays toolbar and ribbon options instead of text. Excel has made an educated guess about what you want to do based on what you have clicked on...*

- 5 Click anywhere in the worksheet with the **left** mouse button to close the shortcut menu



## For Your Reference...


To **display** a **shortcut menu**:

1. Point to the object or area of the screen on which you want to perform an operation
2. **Right-click** to display the shortcut menu

## Handy to Know...

- Once a **shortcut menu** appears, the options in it are selected by clicking on them with the left mouse button, or pressing the letter underlined in the menu option.

# UNDERSTANDING DIALOG BOXES

Dialog boxes contain a series of controls that are used to adjust settings for a particular aspect of a worksheet or cell. They appear either when you click on a **dialog box launcher**  at the bottom

right corner of a **Ribbon** group, or when you click on a command that displays a dialog box. Dialog boxes are often used for adjusting some of the more advanced aspects of a worksheet or cell.

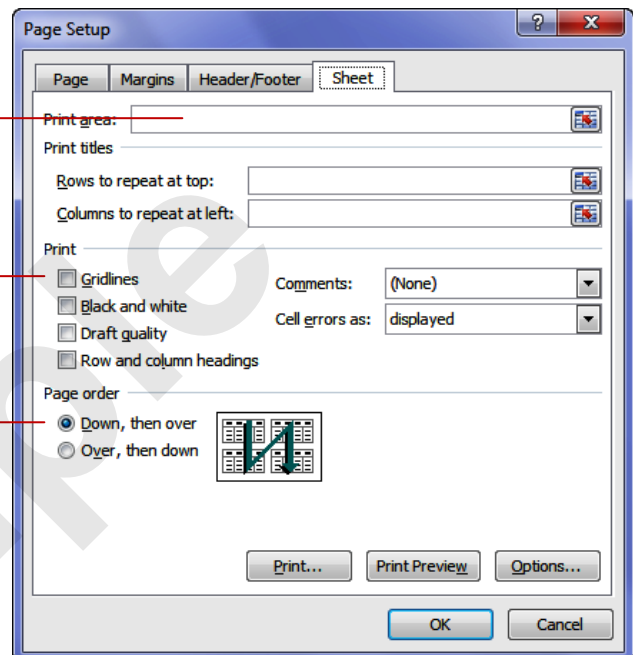
## Typical Dialog Box Controls

Dialog boxes have various tools to help you perform tasks. These tools are known as **controls** and some typical ones are shown below.

**Text boxes** are used to enter text such as a name, title, cell address, or reference. The buttons to the right here indicate that these boxes require a cell address.

**Check boxes** turn settings either on or off. When on they display a tick and therefore these controls are also known as tick boxes.

**Option buttons** provide a series of mutually exclusive options. Option buttons appear as round circles. The option that is currently active appears with a black dot.

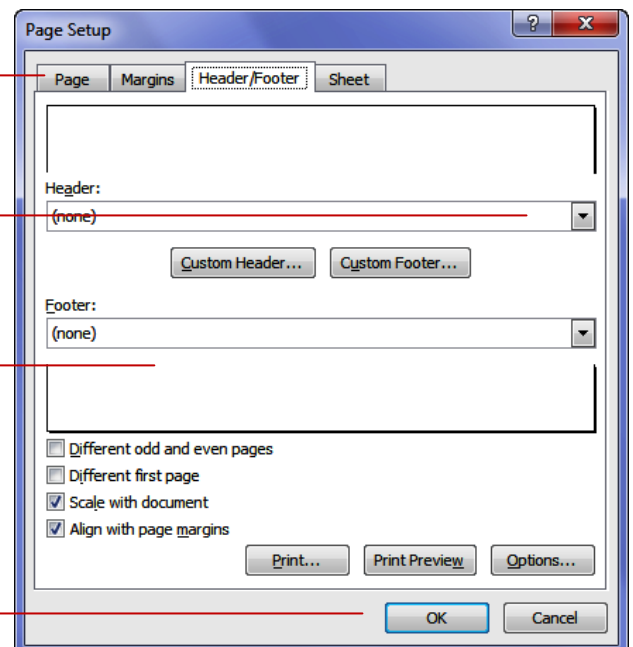


**Tabs** are used to provide more settings on the one dialog box.

**Drop arrows** provide a list of options for the text box when the arrow is clicked. The list "drops down" from the arrow.

**Preview boxes** provide a preview of what the selected settings will look like.

**Command buttons** provide a means of saving the changed settings [OK], or closing the dialog box without accepting any changes made [Cancel].



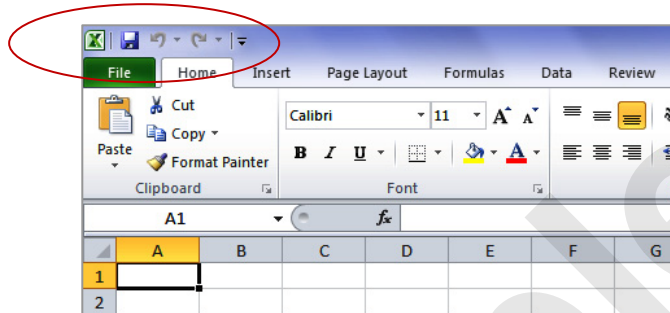
# UNDERSTANDING THE QUICK ACCESS TOOLBAR

The **Quick Access Toolbar**, also known as the **QAT**, is a small toolbar that appears at the top left-hand corner of the Excel window. It is designed to provide access to the command tools

you use frequently, such as **Save**, and includes by default the **Undo** and **Redo** buttons. You can add more tools to the **Quick Access Toolbar** to make finding favourite commands easier.

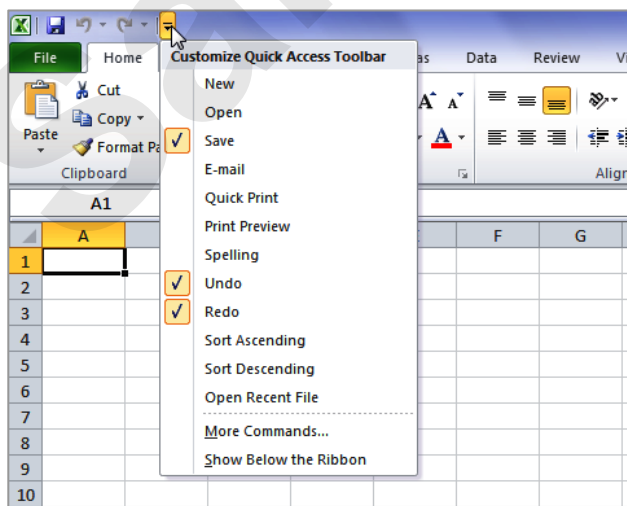
## The Quick Access Toolbar

The **Quick Access Toolbar** is positioned at the top left corner of the Microsoft Excel 2010 screen. In its default state, it includes the **Save** tool, the **Undo** tool and the **Redo** tool.



## Customising the Quick Access Toolbar

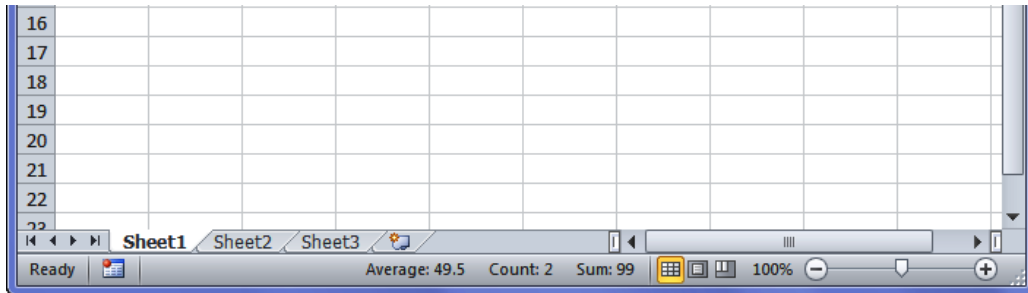
Appearing immediately to the right of the **Quick Access Toolbar**, the **Customise Quick Access Toolbar** tool displays a list of commonly used commands that you can add to the toolbar. You can select the items that you want to add. The ticks that appear to the left of the menu options show you that an option is already displayed.



# UNDERSTANDING THE STATUS BAR

The **Status Bar** is the bar across the bottom of the Excel window. It is a very useful aid that tells you the current status of Excel, performs quick calculations on the selected range in the

worksheet, and allows you to zoom in and out of the worksheet. It also includes tools that can change the worksheet view. You can customise the status bar to change the information shown.



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## 1 Status Indicator

The **Status Indicator** indicates the current status of Excel and the worksheet. The most common indicator you'll see here is **Ready** indicating that Excel is ready and waiting for you to do something.

## 2 Average

This tells you the average value in the cells currently selected in the worksheet – providing the cells contain numeric data. Selected cells are the ones that have the active cell indicator around them and are commonly referred to as a **range** of cells. Obviously for a calculation to be performed there will need to be numbers in the active range of cells.

## 3 Count

This tells you how many non-empty cells are in the cells currently selected in the worksheet.

## 4 Sum

This tells you the sum total of the cells currently selected in the worksheet – providing the cells contain numeric data.

## 5 View Tools

The **Worksheet View** tools allow you to change the view of the worksheet. You can select from **Normal**, **Page Layout**, and **Page Break Preview**.

## 6 Zoom Level

This button displays the current zoom percentage. If you click on the button, the **Zoom** dialog box will appear so that you can select a specific zoom percentage.

## 7 Zoom Slider

The **Zoom Slider** indicates the current zoom level, where the centre mark indicates 100%. You can either drag the marker to the left or right, or click on a specific point of the slider to set a zoom percentage. You can also click on the buttons at either end of the slider to zoom in (+) or zoom out (-).

## 8 Resize Icon

The **Resize** icon is visible in the Excel window if the screen is not maximised. It allows you to change the size of the window by dragging in or out.



What appears on the status bar can vary greatly. Don't be alarmed if the one on your screen doesn't exactly match the status bar example shown above. For your status bar to match the one above you will need to enter numbers into a range of cells and switch certain status bar indicators on and others off. The one above is shown as a representative example of what can appear on a status bar.

# EXITING SAFELY FROM EXCEL

When you are finished working with Excel you'll find there are several ways to exit from it. If you have made changes to the worksheet Excel will ask if you wish to save these changes before

exiting. You'll learn all about saving a little later on. If you don't wish to retain any changes you've made you can decline Excel's offer to save your work.

## Try This Yourself:

*Before trying this exercise ensure that Microsoft Excel 2010 has started...*

- 1 Click in cell **A1** (the top left cell), type your name and press **Enter**

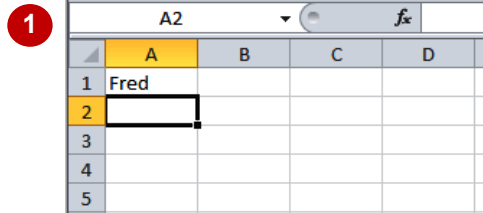
*Doing this has made a change to your workbook which should be picked up when you attempt to exit...*

- 2 Click on the **File** tab and click on the **Exit** quick command at the right of the screen

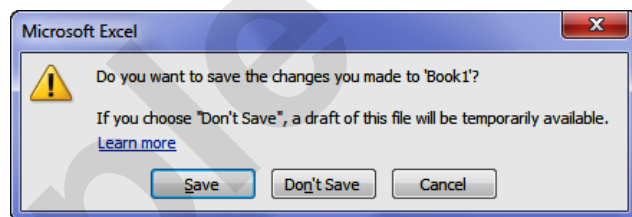
*You will now be prompted to save your workbook if you wish to retain your data. The message you receive will be one of the ones shown – don't worry about the difference between them for now (you'll learn more about them later).*

*We have no reason for keeping a workbook with our name in it so we won't bother saving...*

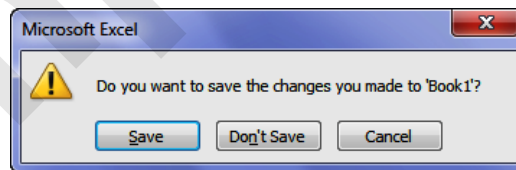
- 3 Click on **[Don't Save]** to exit from Excel



- 2 You'll receive a message either like this...



*Or like this...*



## For Your Reference...

To safely **exit** from Microsoft Excel 2010:

1. Click on the **File** tab and click on the **Exit** quick command
2. If you want to keep your changes click on **[Save]** then specify a workbook name and location, otherwise click on **[Don't Save]**

## Handy to Know...

- Whenever you are in doubt about whether to save or not you should err on the side of caution and save the workbook. You can delete unwanted workbooks at a later date, but you can seldom retrieve data that has not been saved!