

Excel Introduction 2002/2003

SAMPLE

Excel Introduction 2002/2003

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Published by Whats IT

Contact details:

PO Box 45

Camp Hill Qld 4152

Email: info@whatsit.com.au

Web: www.whatsit.com.au

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Author: Trudy Weekes

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Before you start...

This manual has been designed as a self-paced instructional aid. It assumes that you have gained a basic understanding of Microsoft Windows.

The exercises

The exercises referred to in this manual are located on the CD provided with this training manual. Please email info@whatsit.com.au if you require the exercises to be re-sent.

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Typing, navigating and editing spreadsheets

Objectives

At the end of this module you will be able to:

- Understand the various uses of a spreadsheet and the Excel environment
- Create a blank workbook
- Use the keyboard to navigate
- Use the mouse to navigate
- Enter text and numbers
- Edit text and numbers
- Insert Comments
- Insert Rows and Columns
- Re-size Rows and Columns
- Delete Rows and Columns
- Save and close a Workbook

Microsoft Excel – an overview

What is a spreadsheet

A spreadsheet is a collection of data, like a table, that has been organised into rows and columns.

You can use these worksheets to perform calculations and chart data. Once you have added formulae to your cells any of the numbers used within those formulae may be altered, with the answer automatically updating.

Workbooks

In Microsoft Excel a new file is referred to as a Workbook. A Workbook is a little like a folder into which you place worksheets that have something in common. For example you may have three different worksheets all relating to the one customer. The default is 3 standard worksheets – you can easily add worksheets as required to your workbook.

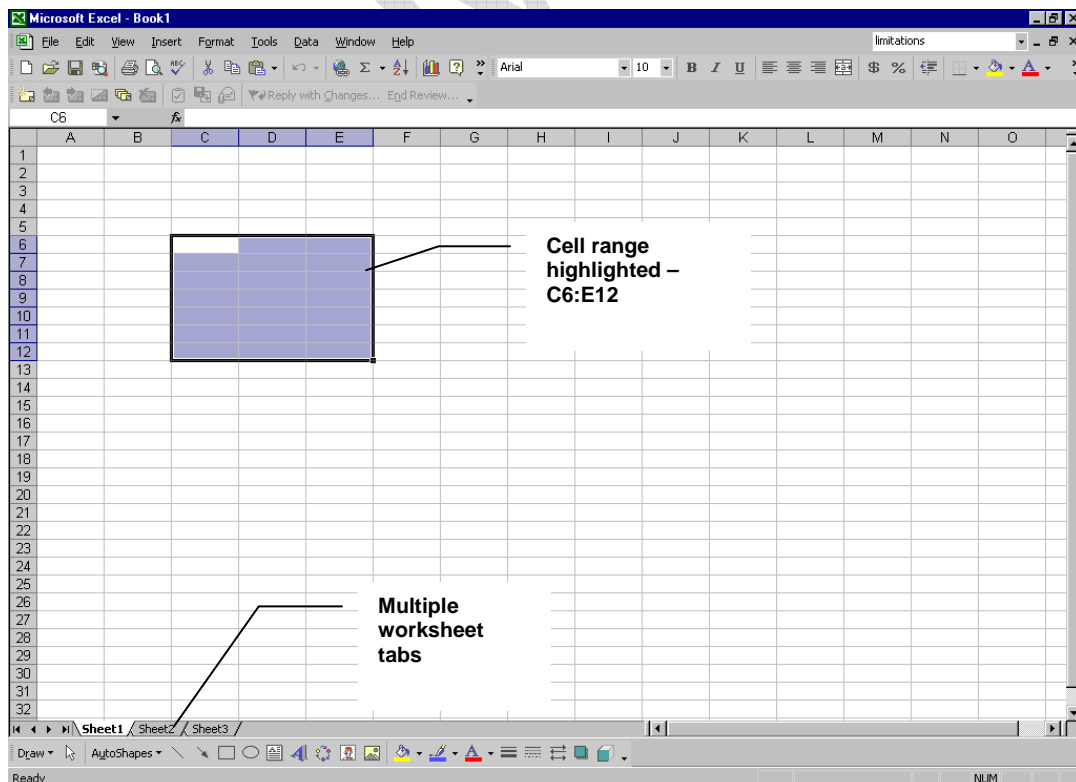
Each worksheet can have a maximum of 65,536 rows and 256 columns – giving you over 16,000,000 cells in which to work!

Cell references

Each cell is numbered and we refer to the cell location based on the column and row in which it falls. For example, the cell that occurs at the in section at column C and row 10 is referred to as cell C10 – in other words, you read cell references as you would a road map!

Cell ranges

When you refer to a selection of cells, you refer to a cell range (for example, the cells included in the selection from **C6:E12**).

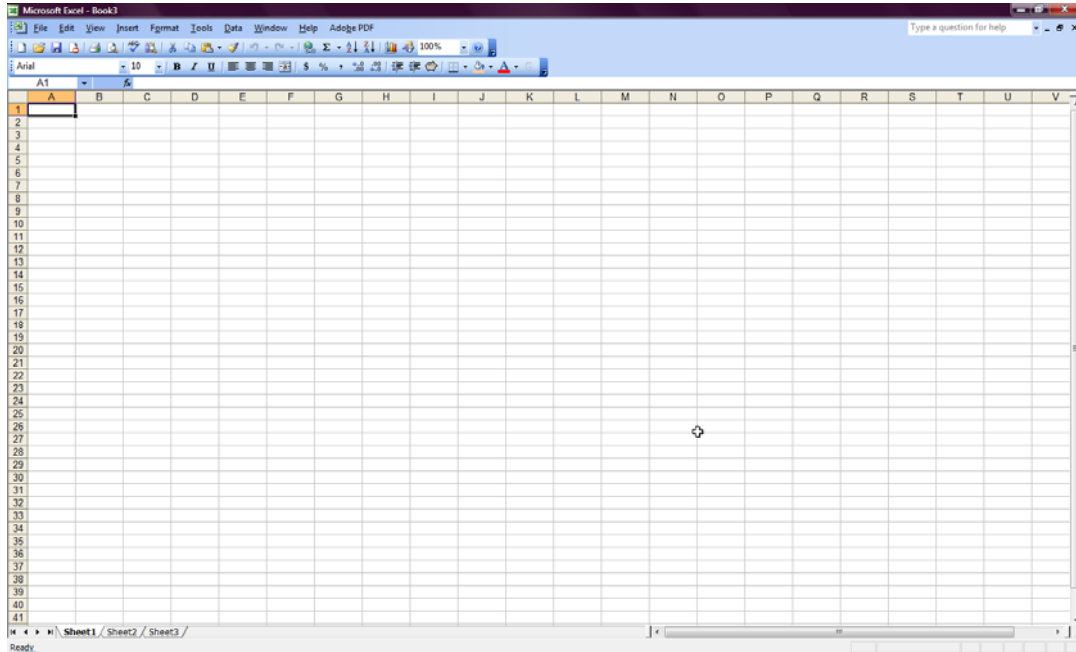


Starting Excel

1. Click the **Start** button, then **Programs**, then **Microsoft Office**, then **Microsoft Excel**.

This location can differ in your workplace.

Excel launches.

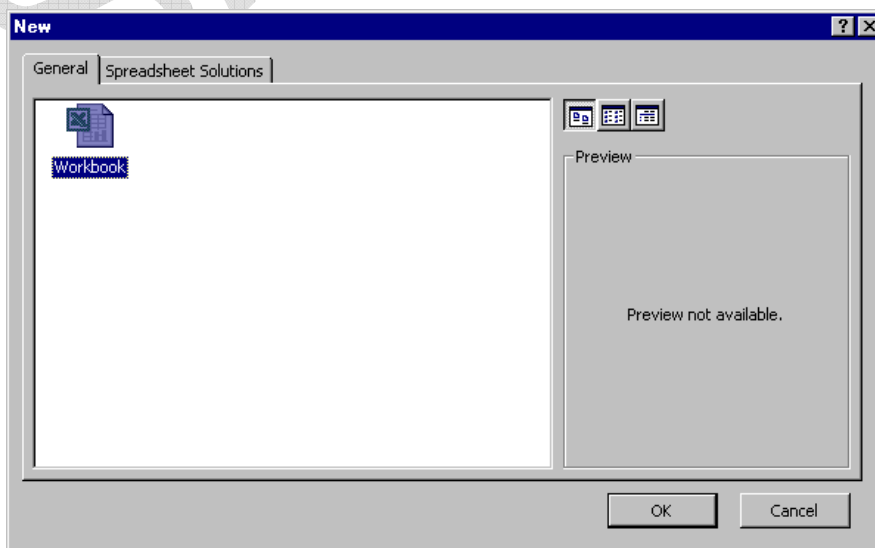


Creating a new Workbook

To create a new Workbook

1. Select the **File** menu, then **New**.

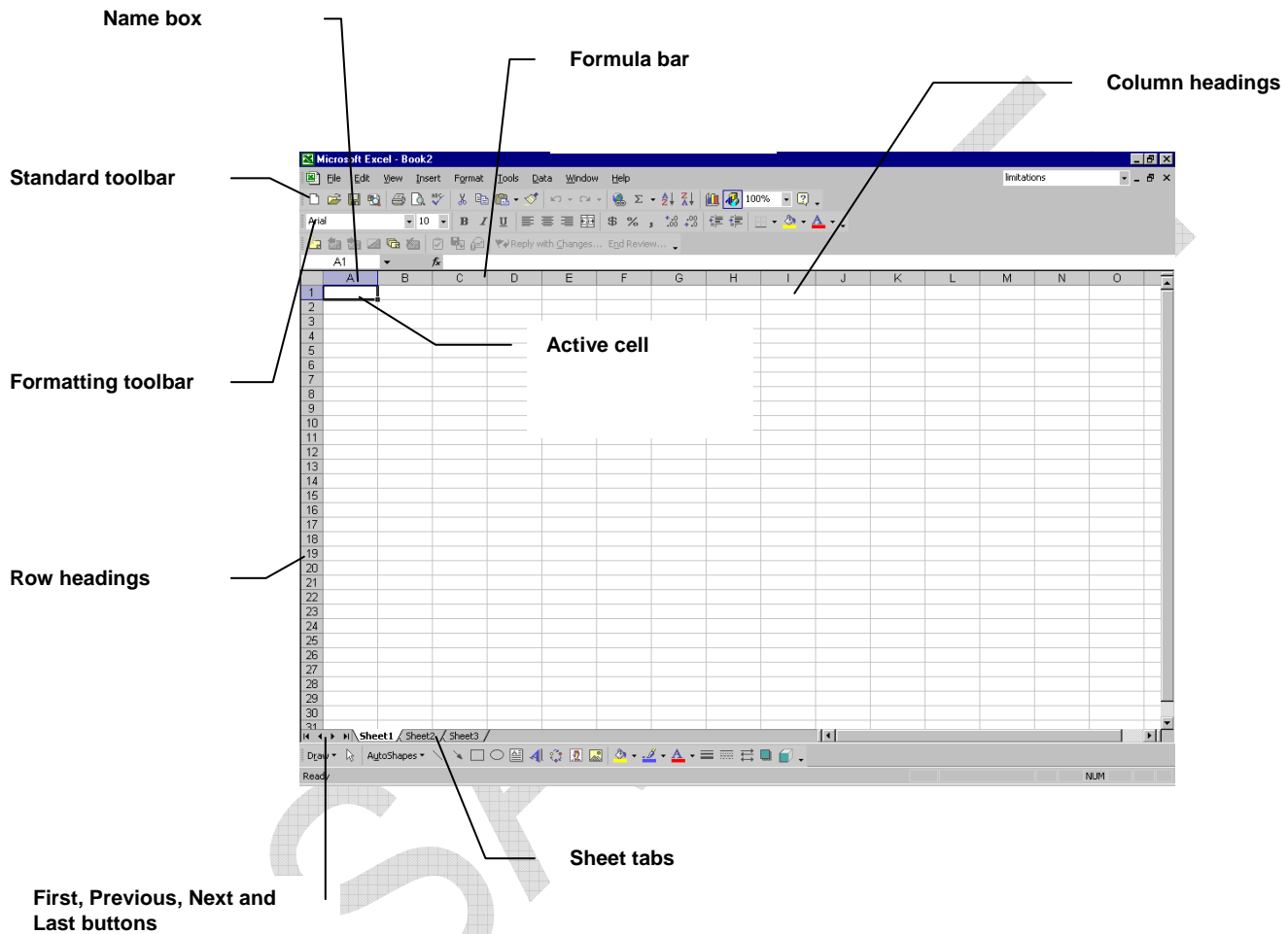
*The **New** dialog box appears.*



2. Select **Blank workbook**.
A new blank workbook appears.

The Excel environment

The following are standard features of Microsoft Excel.



<i>Use the following item...</i>	<i>to...</i>
<i>Standard toolbar</i>	access the most commonly used Excel functions (eg cut, copy, paste etc)
<i>Formatting toolbar</i>	format your cells/data
<i>Name box</i>	“go to” a particular cell reference
<i>Formula bar</i>	create and/or edit formulae
<i>Row/Column headings</i>	select a row or column
<i>Active cell</i>	type text in the current location

<i>Use the following item...</i>	<i>to...</i>
Sheet tabs	move between worksheets in the current Workbook
⇐⇐ First ⇐ Previous ⇒ Next ⇒⇒ Last	preview the various worksheets in your workbook

Entering and editing data

You create a worksheet by typing text, numbers, dates and headings into the various cells on the worksheet. As you are typing your data into a cell, notice that it also appears on the formula bar above the column headings. You can have up to 32,000 characters in any cell.

Once you have entered data into a cell you can easily edit it using the mouse or keyboard short cuts. When you edit data in a cell you need to open the cell first.

To enter data


- Click into cell **C2** and type the following:
Joe's Gadgets – Sales
- Press the [Enter] key.
- Using the diagram below, type the remaining text and numbers.

	A	B	C	D	E	F	G
1							
2			Joe's Gadgets - Sales				
3							
4		No of gadgets sold		54		Total Sales	
5						Total Cost	
6						Profit	
7							
8		Selling price each		5			
9		M'facturing cost ea		3			
10							
11							

Note: If the data you are typing is wider than the active cell, and the cell next to it is empty, the data will appear to "spill over" into the next cell. Alternatively, if the cell next to your active cell contains data, the data in the first cell will appear to be chopped off. This can be adjusted by increasing the width of the cell which contains the data. This will be covered later on in your training.

Methods of entering Data

Data can be entered in various ways:

- ✿ Enter the text/number into the cell.
- ✿ Click on the green tick icon in the formula bar. 
- ✿ Press any arrow key or click outside of the cell with your mouse.
- ✿ Press the **[Enter]** key.
- ✿ Press the **[Tab]** key.

Note: You will find it easier to type data in your cells downwards rather than across (that is unlike a Word table).

Methods of editing data

Data can be edited in various ways:

- ✿ Click in the cell you want to edit and press the **[F2]** key.
- ✿ Click into the formula bar.
- ✿ Double click in the cell you want to edit.

Enter Data

1. Double click in cell **C2**.
The cell is "opened" and a vertical flashing cursor appears indicating your current typing position.
2. Edit the text in cell **C2** to now be:
Joe's Gadgets – Monthly Sales

Note: If you are entering or editing text in a cell and you want to cancel what you have typed, simply press the **ESC** key or click on the red "X" icon on the formula bar.



Saving, closing and opening Workbooks

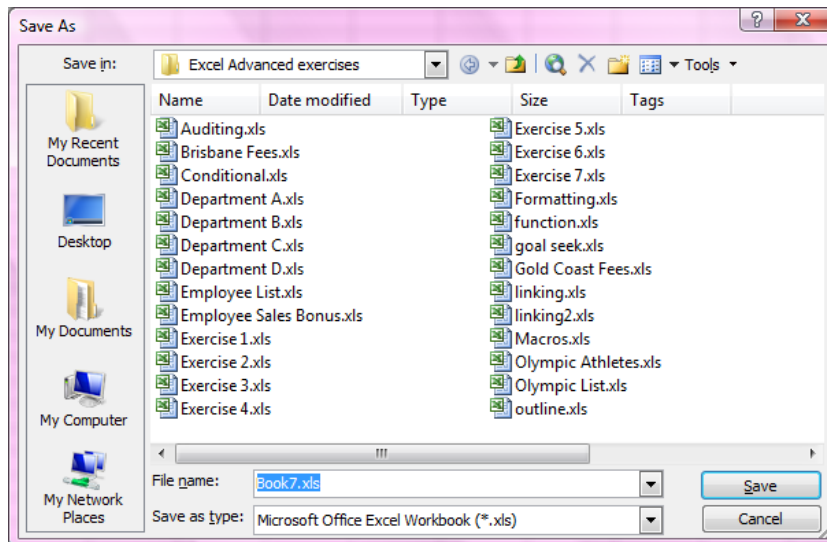
You save, close and open Excel workbooks in the same way you would save and close files in any application.

To save a Workbook

1. Select the **File** menu, then **Save As**.
The Save As dialog box appears.



(CTRL + S)



2. In the **Save in** box, select the drive, folder where you want to save the file.
3. Click into **File name** and type **Gadget Sales**.
4. Choose the **Save** button.

To close a Workbook

1. Select the **File** menu, then **Close**.



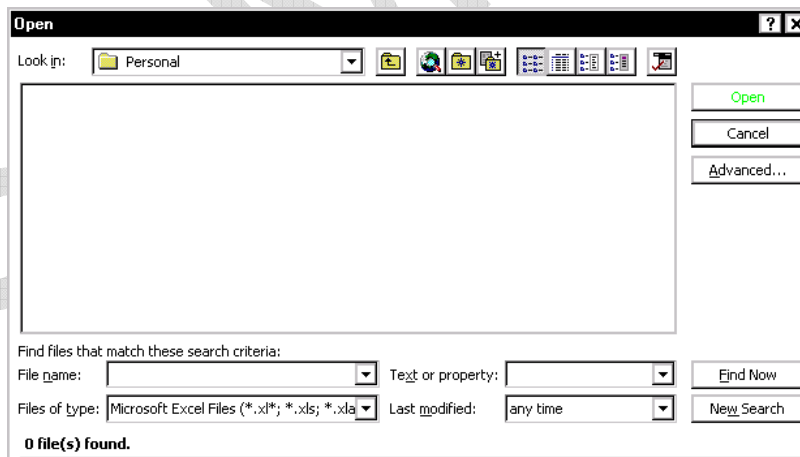
(CTRL + W)

To open a Workbook

1. Select the **File** menu, then **Open**.



(CTRL + O)



2. In the **Look in** box, select the drive, folder and file you require.
3. Select **Gadget Sales**.
4. Choose the **Open** button.
5. Select the **File** menu, then **Close**.

Inserting comments into cells

You can add comments to your cells – notes that you can display or hide – containing information about the content of your cells.

Comments are hidden in a worksheet, and are indicated in a cell by a small, red triangle at the top right hand corner of the cell.

To insert a comment into a cell

1. Choose the **New** button from the Standard toolbar. 

A blank workbook is created.

2. Type the following information into the workbook:

	A	B	C	D
1		Jan	Feb	Mar
2	Employee 1	10	23	43
3	Employee 2	23	45	23
4	Employee 3	33	54	55

3. Click on cell **C2**.

4. Select the **Insert** menu, then **Comment**.

(SHIFT + F2)

A comment box appears, together with the name of the author of the comment.

	A	B	C	D	E	F
1		Jan	Feb	Mar		
2	Employee 1	10	23	43		
3	Employee 2	23	45	23		
4	Employee 3	33	54	55		
5						
6						

Whats IT:
Top Sales for 2009

5. Type the comment **Top Sales for 2009**.

6. Click outside the comment box when finished.

Note: A small red triangle – a comment “indicator” should appear in the top right hand corner of the cell. You can change the way these comments display by selecting the **Tools** menu, then **Options**, then the **View** tab and adjusting the **Comments** section.

To view a comment

1. Hover your mouse over the **C2**.

The comment displays the text.

To edit or move a comment

1. Click into cell **C2**.
2. Select the **Insert** menu, then **Edit Comment**. (SHIFT + F2)
3. Perform one of the following steps:
 - Edit the text, then click outside of the comment box when finished.OR
 - Move the comment box to another location by dragging the “fuzzy” border around the box.

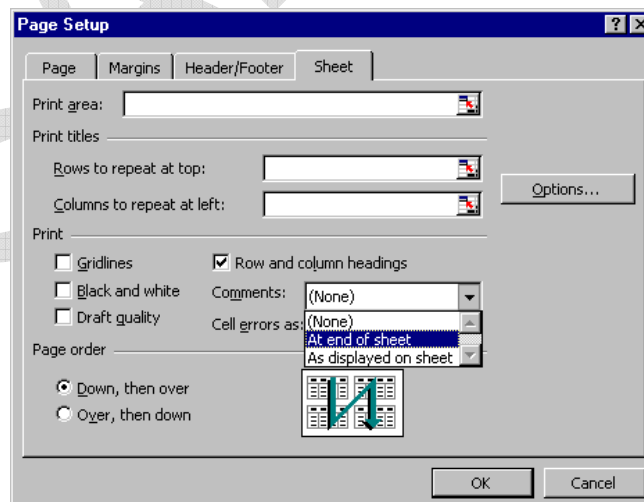
	B	C	D	E	F	G
Jan		Feb	Mar			
	10	23	43			
	23	45	23			
	33	54	55			

Whats IT:
Top Sales for 2009

To print a comment

As default your comments do not print, if you require them to print you will have to set this option.

1. Select the **File** menu, then **Pagesetup**.
The Pagesetup dialog box appears.
2. Select the **Sheet** tab.



3. Tick **Row and column headings**.

Note: Ensure the Row and column headings is ticked as this option displays the columns and rows on the print out; as the comments printed display the cell reference

4. Click the dropdown box for **Comments** and select **At end of Sheet**.
5. Choose the **OK** button.
6. Select the **File** menu, then **Print**, and choose the **OK** button.

The Workbook is printed with the comments.

To delete a comment

1. Click into cell **C2**.
2. Select the **Edit** menu, then **Clear**, then **Comments**.

Navigating around a worksheet

Use the mouse to scroll around a large worksheet or use the following shortcut keys listed below:

You can also use the "Go To" feature to jump directly to a specific cell.

To navigate around a worksheet

1. Use the keys below to navigate around your worksheet.





<i>Use the following key...</i>	<i>to move...</i>
Arrow keys	one cell at a time (up, down, left, right)
Tab/Shift + Tab	one cell to the right/left
Enter	down one cell
Home	to the first cell in the row
Page Up/Page Down	one screen up/down
Ctrl + Home	to the first cell in the worksheet (A1)
Ctrl + End	to the last cell which contains data in the worksheet
Ctrl + Page Down	to the next worksheet
Ctrl + Page Up	to the previous worksheet

Mouse pointers

Before you start selecting and working with cells in Excel, it is important to be aware of the different shapes your mouse pointer will take.

You will perform different functions on data, depending on the shape of your mouse pointer! For example:

Mouse pointer shapes




<i>When the mouse pointer looks like this...</i>	<i>you will...</i>
	select text.
	move/copy cells.
	copy text using AutoFill.
	type text/data

Selecting cells and data

Before you can perform operations on your cells/data you need to know the most efficient ways of selecting your cells.

You can, of course, select cells by dragging your mouse over them, highlighting what is known as a **range** of cells - however, whenever you select multiple cells you still retain an active cell within that range. This is the cell that appears "white" within the selection.

To select a range of cells

1. Perform each of the following steps:
 -  Using your mouse drag across the cells **A1 to C20**.
 - THEN
 -  Click into cell **A1**, hold down the **[Shift]** key and click into cell **C20**.
 - THEN
 -  Click into cell **A1** press and hold down the **[Shift]** key and press the arrow keys on your keyboard until you reach cell **C20**.
2. Click on any cell to deselect the range.

To select multiple ranges

1. Select cells **A1 to C20**.
2. Hold down the **[Ctrl]** key and select the next range of cells **F2 to G10**.

Both ranges of cells are highlighted without any intervening cells being selected.

- Continue selecting different ranges with the **[Ctrl]** key.

Hint! This is a useful tip when you want to format a number of cells in different places on your worksheet. By selecting non-consecutive ranges you can speed up your formatting/editing!

To select a row

- Click on row heading **3** at the left of the row.

Click the row heading number

	A	B	C	D
1		Jan	Feb	Mar
2	Employee 1	10	23	43
3	Employee 2	23	45	23
4	Employee 3	33	54	55
5				

To select a column

- Click on column heading **B** above the column.

(CTRL + SPACEBAR)

Click the Column heading letter

	A	B	C	D
1		Jan	Feb	Mar
2	Employee 1	10	23	43
3	Employee 2	23	45	23
4	Employee 3	33	54	55

To select the entire worksheet

- Click on the **Select All** button at the top left hand corner of your column headings.

(CTRL + A)

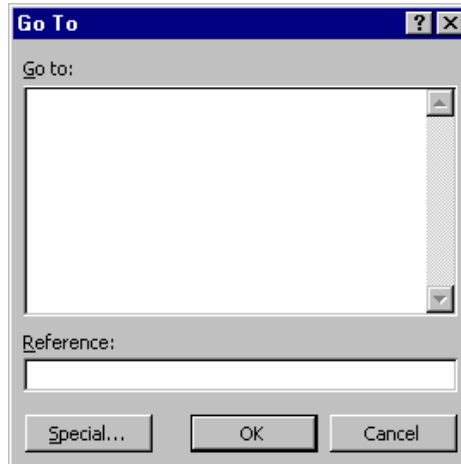
Click the grey square to select all cells

	A	B	C	D
1		Jan	Feb	Mar
2	Employee 1	10	23	43
3	Employee 2	23	45	23
4	Employee 3	33	54	55

To select using Go To

- Select the **Edit** menu, then **Go To**.
The **Go To** dialog box appears.

(CTRL + G/
F5)



2. In the **Reference** box type the cell **G20**.
3. Choose the **OK** button.
Cell G20 is selected.
4. Close the file without saving.

Generating text using AutoFill

You can use Excel's AutoFill feature to automatically generate different series of data. For example, headings such as days of the week, months of the year, dates etc are all recognised series that can be repeated automatically using AutoFill. You can base your series on one or more cells across a worksheet so that you can create a pattern to be repeated across your cells.

A list of recognised series are shown in the table below:

Autofilling this data...	will result in...
January	February, March, April etc.
Monday	Tuesday, Wednesday, Thursday, etc
10 January 2000	11 January 2000, 12 January 2000 etc
QTR 1	QTR 2, QTR 3, QTR 4
9:00 am	10:00 am, 11:00 am, 12 pm, etc
Product 1	Product 2, Product 3 etc
1st Period	2 nd Period, 3 rd Period etc.
300	300, 300, 300

Hint: You can automatically insert today's date using the **CTRL ;** key combination.

To create a series using AutoFill

1. Create a blank workbook.
2. Click into cell **A1** and type the following data:

	A	B	C
1	January		
2	Period 1		
3	Employee 1		
4	31/07/2008		
5	Qtr 1		
6	1		
7	1/08/2008	7/08/2008	
8	1/08/2008	1/09/2008	
9	31/08/2008	30/09/2008	
10	1/01/1900		
11	9:00 AM		
12			

3. Click into cell **A1**.
4. Move your mouse to the bottom right hand corner of the selected cell(s) so that the pointer turns into a cross-hair. The small black square located there is called the **Fill Handle**.

	A	B
1	January	
2	Period 1	
3	Employee 1	

Make sure your mouse assumes a normal pointer shape when you point to the edge of your selection

5. Hold down your left mouse button and drag the **Fill Handle** across to cell **G1**.
6. Release the mouse.
A series is created from the source data.
7. Repeat for the remaining cells.

Hint! You can hold down your **CTRL** key whilst AutoFilling to extend a single number (for example 7) to an incrementing result (example 8 , 9, 10...)

Deleting cells, rows and columns

To delete the contents of cells

1. Select cell **A2**.
2. Press the [**Delete**] key.

To delete a column

1. Click on the column heading **B**.
2. Select the **Edit** menu, then **Delete**.

To delete a row

1. Select the row heading **2**.
2. Select the **Edit** menu, then **Delete**.

Inserting cells, rows, columns and worksheets

Inserting a new column appears to the left of the selected column. Inserting a new row appears above the selection.

To insert a new row

1. Click anywhere in row **3**.
2. Select the **Insert** menu, then **Rows**.

To insert a new column

1. Click anywhere in column **C**.
2. Select the **Insert** menu, then **Columns**.

To insert cells

1. Click into cell **B4**.
2. Select the **Insert** menu, then **Cells**.
*The **Insert** dialog box appears.*
3. In the **Insert** box, select the option you require (that is whether you want the existing cells to be shifted to the right or downwards).
4. Choose the **OK** button.
5. Close the file without saving.

Note: You can use the speed key combination (**CTRL + SHIFT + "+"**) to insert a new row, column or cells. If you want to use this combination to insert a row/column, select an existing row/column first – the new row/column will appear to the right of/above the currently selected item.

Moving and copying cells

You can choose from one of two methods when moving or copying cells. You can choose to cut/copy and paste them in the traditional way; or you can highlight your cells and drag them to a new location.

To move cells

1. Select the **File** menu, then **Open**.
2. Choose the file **Cut Copy Paste.xls**.
3. Select cells **B2 to B12**.
4. Select the **Edit** menu, then **Cut**.
5. Click into cell B3.
6. Select the **Edit** menu, then **Paste**.



(CTRL + X/
CTRL + C)



(CTRL + V)

Note: When you choose to cut/copy cells you will see “marching ants” around your selected text. This simply indicates that the data is in memory (clipboard).

When you cut data, the “marching ants” will disappear once you have pasted the data into its new location. If however, you copy data, the “marching ants” will continue to “march” even after you have pasted your data, indicating that you can continue to paste the same data many times.

To stop the ants from “marching” simply press your **ESC** key!

Moving text using drag and drop

1. Select cells **D3 to F13**.
2. Move your mouse pointer to the edge of your selection.

Your mouse pointer should assume a normal mouse pointer shape. That is, it should not look like a cross-haired pointer or a maltese-cross shape.

	A	B	C	D	E	F	G
1				The Fabulous Fruit Company			
2							
3		Apples		Oranges	Kumquats	Star Fruit	
4	ACT	100		150	20	100	
5	NSW	7000		8000	1400	7000	
6	VIC	6000		9000	1200	600	
7							
8	TAS	666		999	133.2	666	333
9	NT	100		150	2	200	
10	WA	700		1050	140	700	
11							
12							
13	QLD	4000		6000	800	4000	
14							
15							

Note: If you want to copy data rather than move it, hold down the **CTRL** key before the next step.

3. Hold down your left mouse button and drag the selection to the location starting at **C3**.
4. Release the mouse button.
5. Save and close the file.

Note: When you move/copy data using drag and drop, it doesn't go via the Clipboard.

To copy cells

1. Ensure the file **Cut Copy Paste.xls** is open.
2. Select cells **E3 to E13**.
3. Select the **Edit** menu, then **Copy**.
4. Click into cell **F3**.
5. Select the **Edit** menu, then **Paste**.



(CTRL + V)

Note: When you choose to cut/copy cells you will see “marching ants” around your selected text. This simply indicates that the data is in memory (clipboard).

When you cut data, the “marching ants” will disappear once you have pasted the data into its new location. If however, you copy data, the “marching ants” will continue to “march” even after you have pasted your data, indicating that you can continue to paste the same data many times.

To stop the ants from “marching” simply press your **ESC** key!

Copying text using drag and drop

1. Select cells **D3 to D13**.
2. Move your mouse pointer to the edge of your selection.
3. Press and hold the [**Ctrl**] key.

Your mouse pointer should assume an arrow pointer shape with a small plus sign to indicate the copy. That is, it should not look like a cross-haired pointer.

	A	B	C	D	E	F
1				The Fabulous Fruit Company		
2						
3		Apples	Oranges	Kumquats	Star Fruit	Star Fruit
4	ACT	100	150	20	100	100
5	NSW	7000	8000	1400		7000
6	VIC	6000	9000	1200	600	600
7						
8	TAS	666	999	133.2	666	666
9	NT	100	150	2	200	200
10	WA	700	1050	140	700	700
11						
12						
13	QLD	4000	6000	800	4000	4000
14						
15						

4. Hold down your left mouse button and drag the selection to the location starting at **H3 to H13**.

5. Release the mouse button, then the **[Ctrl]** key.

Note: When you move/copy data using drag and drop, it doesn't go via the Clipboard.

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