

Contents

Session 2

Contents	23
Cell Formats <i>cont.</i>	24
Worksheet Views	24
Naming Conventions	25
Copy / Duplicate Worksheets	27
Entering Formula & Functions	28

Word Impressions | Do Not Copy

Cell Formats *cont.*

Exercise Practice Tasks: 2-Practical Formats

- Retrieve the Workbook **Plant Catalogue.xls**

This workbook file will be used to prepare a product listing flyer using a variety of format styles, practical Ribbon tools and other Save options.

Save to your master folder with the same name (*not as a copy*)

Worksheet Views

Worksheets can be examined in various views depending upon what you want to look at.

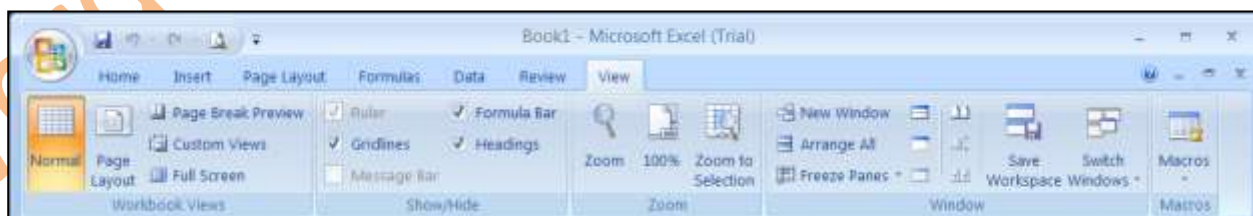
NORMAL: The traditional spreadsheet view and work area where you can see rows, columns and cells.

PAGE LAYOUT: Shows you how the spreadsheet appears on paper when printed displaying the margins and a ruler outside the cells and row & column headings. This is a very new feature generally only found in MS Word. It also enables you to see any other active pages in the same worksheet.

PAGE BREAK PREVIEW: Can be used to adjust the page breaks in the spreadsheet before you print it.

You can choose to set a **PRINT AREA:** To view and print a specific set of data only. (*Just remember to clear the print area when you have finished with it or you may think you have lost all your work*).

FREEZE PANES: Enables you to view and work in a large amount of data which expands to more than one page, you are able to keep the headings /Titles of the columns or rows still by choosing this option.



Arrange to **TILE**: All open windows in the current program so they can all be viewed at once. (useful when you need to copy and paste data across various workbooks)

SPLIT: The current working sheet to view data from two distant locations.

Diagram: 12 -Split & layout screens



ZOOM: The worksheet or selected data to focus on a particular item.



Change the *Normal View* to a **FULL SCREEN**.

Try all these options on the current sheet....

Naming Conventions

NAME DOCUMENTS:

To make it easier to find documents, you are now able to use long, descriptive file names. The complete path to the file, including the drive letter, server name, folder path, and file name, can now contain up to 255 characters as opposed to the limited eight characters in the MS-DOS days. There are conventionally three extension characters at the end of the file names, which primarily denotes and identifies the file types.

- .xls identifies an excel file – pre. 2003
- .xlsx now identifies an excel ver. 2007 file
- .ltx represent excel template files

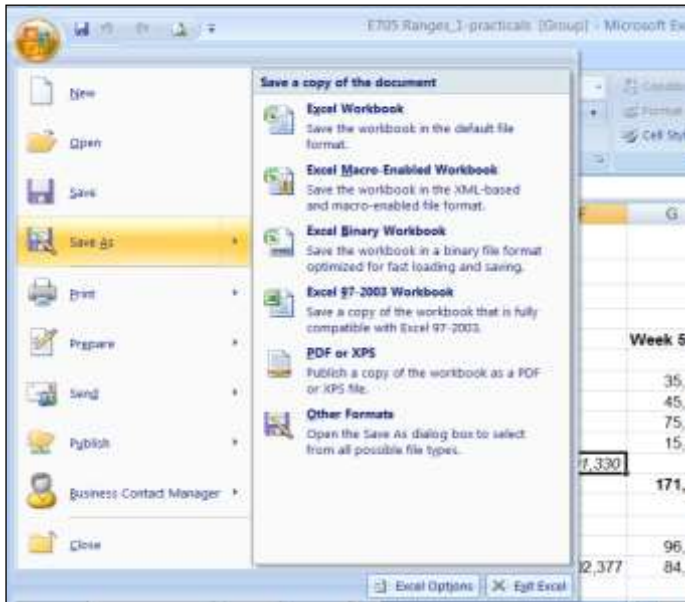
Just as web pages show .html & text files show .txt and so on...

File names cannot include any of the following characters:

forward slash (/)	backslash (\)	greater than sign (>)	
less than sign (<)	asterisk (*)	period (.)	question mark (?)
quotation mark (")	pipe symbol (!)	colon (:)	semicolon (;)

STORING YOUR DOCUMENTS:

The first time you open the **Microsoft Office button** to save a file, select the **Save As** option and notice all the choices available.



After making your choice of file type, select the location to store the file and give it an appropriate name.

Diagram: 13 – Save As dialogue

Practical Task: Exl 4 – saving workbooks

1. Save the current workbook as an **Excel Template** to the Master folder.

Before saving ensure all extra sheets have been deleted.

2. Name the template ‘Plant Catalogue_1’ and close the file immediately without making any changes.
3. Observe the icon’s appearance in your folder.
4. Retrieve the original modified file.
5. Save as a new document in an **Excel Web Page** type.
6. Name the workbook ‘Plant Catalogue_1Web’, read and note any instructions the system might give you.
7. Close the file, return to the Windows Explorer and observe how it has been stored in the system.

Practical Task: Exl 5 – file properties

8. Retrieve the original modified ‘Plant Catalogue’ file.
9. From the **MS Button** select **Prepare &** choose **Properties**

Notice as shown in **diagram14**, a Properties section will appear above the file.

10. Investigate & complete details in the properties window.

11. Close properties and save changes.

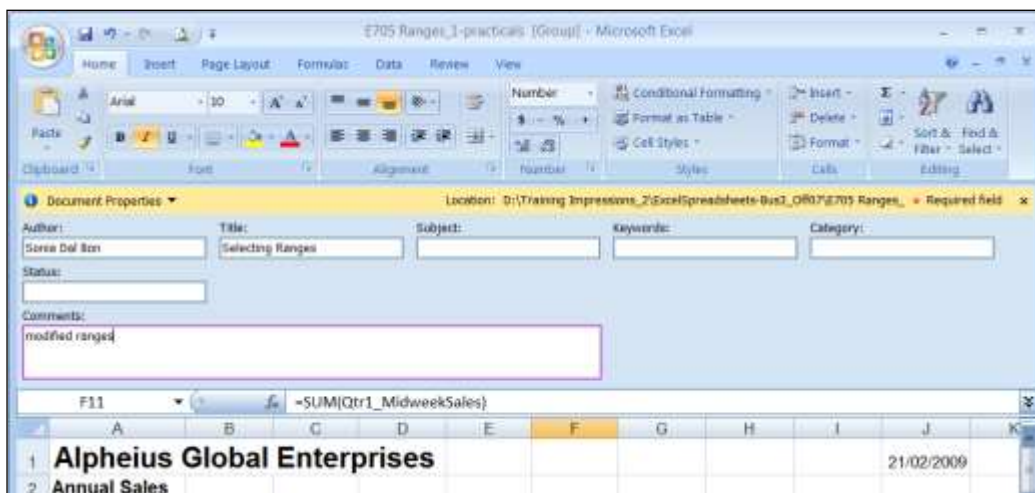


Diagram: 14 – Properties window

Copy / Duplicate Worksheets

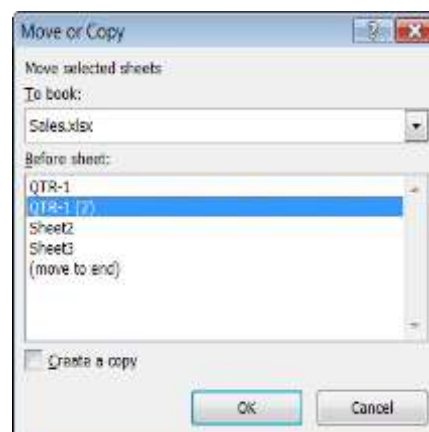
Exercise Practice Tasks: 4 -copy worksheet

Back to our *Sales* workbook...

Make a duplicate (copy) of the current sheet within the current workbook

1. Select **E**dit
2. Choose **M**ove or **C**opy Sheet
3. Select the location where you would like the copied sheet to be placed

Figure: 3





	A	B	C	D	E	F
1	Sales Report					
2	Quarter 1					
3						
4						
5		Item 1	Item 2	Item 3	Item 4	
6	Mary	54	98	105	83	
7	Patty	33	127	39	64	
8	John	22	66	47	39	
9						
10	TOTAL					
11						
12						
13						
14						
15						
16						

4. Ensure you choose *Create a Copy*
5. Press OK or Enter
6. Insert a row between Mary & John and add the name Patty.
7. Type the new data for Patty.
8. Change the name of the sheet to QTR-2 and alter the info within also.
9. Save the changes.

Be ready to learn the first steps to create simple **ADD** formulas.

Figure: 4

Entering Formula & Functions

A formula is an equation that analyzes data on a worksheet.

Formulas perform operations such as addition, multiplication, and comparison on worksheet values as well as combine values.

Formulas can refer to other cells on the same worksheet, cells on other sheets in the same workbook, or cells on sheets in other workbooks.

Excel also contains many predefined, or built-in, formulas known as **functions**.

Functions can be used to perform simple or complex calculations. The most common function in worksheets is the **SUM** function, which is used to add ranges of cells.

When creating a formula in a cell it will also appear in the formula bar. When the formula is completed and entered the result is given in the chosen cell. When that same cell is selected again, the formula will be visible in the formula bar.

Overview Of Functions

Functions are pre-programmed formulas that are already provided for you in Excel. There are over 250 functions available to you covering a wide range of categories including statistics, date and time, financial, database, logical, mathematical, and more.

All **functions** have the same basic structure as follows:

=function name(arguments)

Since a function is a formula it must start with an equal sign.

The equal sign is followed by a valid function **name** which is recognised by Excel. The arguments are the additional pieces of data that the function requires to perform its calculation. In most cases this is a cell or range of cells that is required in the calculation of the function.

Some functions do not take arguments (though these are relatively few), some take only one argument, and some may require several argument values.

Rather than you having to develop long and complex calculations, Excel will generally have a function that can perform the calculation for you. However, as with everything else in life, there are some rules to follow.

The basic rules of functions are:

- a function calculation must start with an **equal sign**
- the **name of the function** must follow the equal sign
- functions accept data through **arguments**, which are enclosed in brackets () following the function name
- arguments must be of the **type** required to perform the calculation
- a function should not contain any **spaces**.

Formula Construction

A formula in Excel begins with an equal sign (=), followed by what the formula calculates. (If you don't use an '=' sign your formula won't work and you will be left with strange looking text in the cell).

For example, the following formula multiplies the value in cell E12 by 5.

=SUM(E12)*5 The formula will recalculate whenever the value in cell E12 changes.

Other examples...

=SUM(B8*C8)	multiply two cells together
=SUM(D5:D8)	adds a range of cells
=SUM(A4+D8)*2	adds individual cells & then multiplies the result
=SUM(C15/E8)	divides the numerical value of two cells

Always match your brackets, or in this case they are known as '**parenthesis**' - you must always close every bracket you open in a spreadsheet formula. Excel will complain if you don't, and may even suggest a solution!

Use Brackets / Parenthesis to ensure that you get the result you want. They are used so that your formula is interpreted by Excel the way you intended. Simple sums like $8+5*3$ could mean:

- | | | |
|-----------------------|----|----------------------|
| a) $8 + 5 = 13$ | | |
| b) $13 \times 3 = 39$ | or | a) $5 \times 3 = 15$ |
| | | b) $8 + 15 = 23$ |

so the best way to write it is (if this is what you intended) $=(8+5) \times 3$

A simple trick to use when constructing formula is to think of the word **BODMAS** (it's a rule)

BO = Brackets Off (or out) **D** = Division **M** = Multiplication
A = Addition **S** = Subtraction.

This is the order that the Operations are executed by Excel.

Of course, in Excel, we don't use the "x" character to show multiplication. Instead we use these symbols for the four basic math operations.

<i>Normal Symbol</i>	<i>Spreadsheet Symbol</i>	<i>Operation</i>
+	+	addition
-	-	subtraction
x	*	multiplication
÷	/	division

Table: 1- Excel Operators

Other Comparison Operators that can be used in Excel are:

Equal to = Not equal to < >
Less than < Greater than >
Less than or equal to <= Greater than or equal to >=
Comma , Parenthesis ()

A simple formula for adding up the figures in cells A1 through A5 would be:
=A1+A2+A3+A4+A5

An easier way to do this would be:

=SUM(A1:A5) This makes use of the cell range as well as the **SUM** function.

Autosum

The Autosum button can be used to automatically construct a formula just like the one used above. It uses the SUM function and automatically selects the numbers that it will use in the cell range, or in other words, the numbers it will add up.

To use it:

- Click on the cell directly under the column of cells that you wish to add, or directly to the right of the row that you wish to add.
- Click on the *Autosum* button.
- Press the Enter key to accept the formula.

- Always work from the bottom right.
- If you are adding columns, always work from the right hand side to the left hand side.
- If you are adding rows, always work from the bottom row to the top. This avoids confusing the *Autosum* feature as to which numbers it should add.

Check the formula before pressing Enter

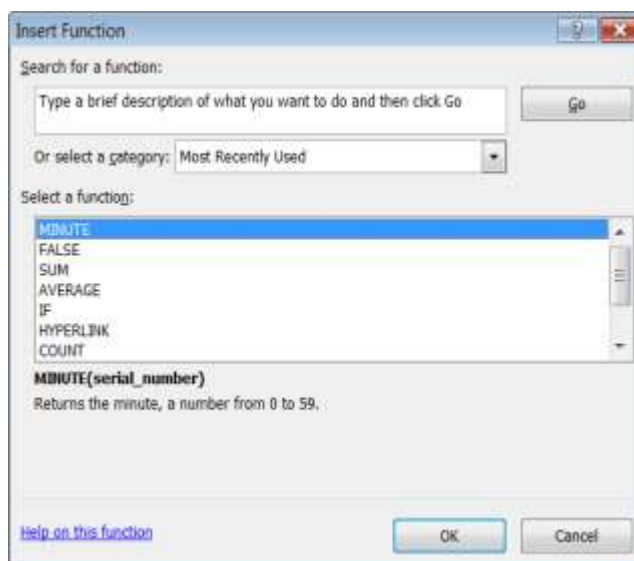
Always check the formula before accepting it with the Enter key- The Autosum may have made a mistake, so make sure it is adding the numbers you want to be added.

There are many other types of formula functions such as:

- ‘Average’ - Returns the value of it’s arguments (figures encased in parenthesis)
- ‘If’ - Returns one value if the condition you specify evaluates to true, and returns another value if the condition specified is deemed false.
- ‘Max’ - Returns the largest value in a set of values
- ‘Min’ - returns the smallest value in a set of values
- ‘Count’ - counts the number of cells containing numbers
- ‘Date’ - Returns the current date
- ‘Now’ - Returns the current date & time

and so on...

Diagram: 15 – Functions



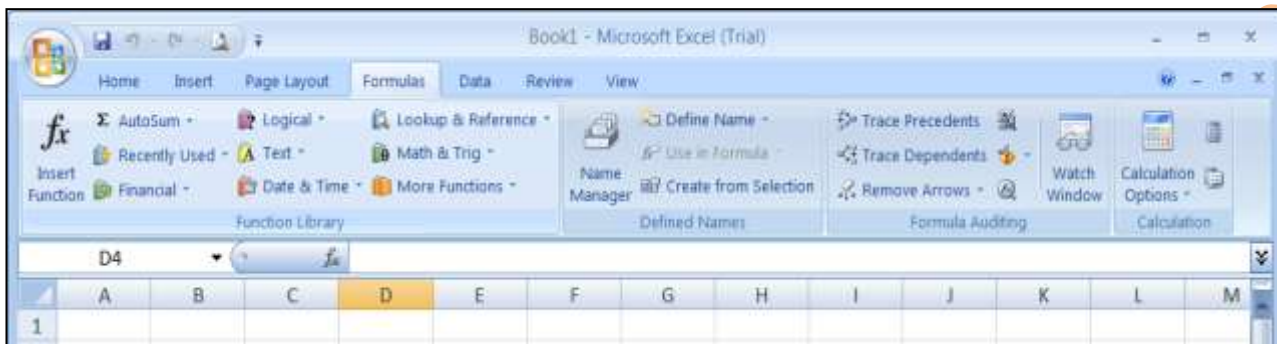


Diagram: 16 – Formula Command Tab

Exercise Practice Tasks: 5 –Formula-mixed

1. Open a new workbook, save the workbook as ‘**Rental Properties**’.
2. Name the sheet as, **RENT**.
3. Set-up your worksheet with the following information, and format as shown.
4. Type your name into cell A2.
5. A3 will be used to insert a date formula.
6. Ensure your workbook is in portrait orientation with left & right margins on 1cm each.

When you have completed this worksheet we will learn a new set of formula.

	A	B	C	D	E
1	RENTAL PROPERTIES				
2					
3		GLENFIELD TOWNHOUSE	BROWNS BAY TOWNHOUSE		
4	Weekly Rental Income	280.00	300.00		
5					
6	<u>Weekly Expences</u>				
7	Strata Fees	15.00	15.00		
8	Rates	16.35	18.70		
9	Insurance	11.55	12.15		
10	Lawns	10.00	10.00		
11	TOTAL				
12					
13	Total Net Weekly Profit				
14					
15	Monthly Income				
16					
17	Annual Profit				
18					

Figure: 1 – Spreadsheet exercise