

# MICROSOFT EXCEL 



STAGE ONE

LEVEL ONE


## FUNCTIONS COVERED FOR THIS COURSE Table of Contents/Index

Listed below are functions you will learn as you work through your lessons.
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## If you have switched on your computer and you are currently at the Windows desktop, then you are ready to start with your first lesson.

There are two ways to operate the Excel functions, either by using the Mouse or using the Keyboard. We suggest that you use the mouse for this training session, however for an understanding of the keyboard method, take note of the keyboard instructions as they will enhance your keyboard performance. All keyboard instructions are detailed with each step-by-step guide. All step-by-step guides are highlighted in italic text.

* Follow all the steps to each lesson, they are clearly highlighted.


## LESSON 1.

Welcome to Microsoft Excel. Excel is a powerful electronic spreadsheeting program designed with many advanced features that make working with numerical figures much easier and faster. Excel stores entries electronically thus enabling easy editing and updating. Excel automatically calculates formulas and it is designed to automatically recalculate a formula if entries in the referred cells have been changed. The automatic calculating feature is one of Excel's strongest functions' as it will ensure that our results are always $100 \%$ correct, which is important when dealing with facts and figures. All companies deal with financial calculations of some sort, most companies control these calculations by applying them to spreadsheets of various kinds.

Step 1. From the Windows desktop, run the Microsoft Excel program.

## RUNNING THE EXCEL PROGRAM

a. Double-click on the Microsoft Excel icon if it is available on your
desktop
or
a. Click on the Start button located at the bottom left of the screen
b. Move your mouse pointer up to the Programs option
c. Move your mouse pointer over to the Microsoft Excel option and
click once with your left clicker

* You will be presented with the Microsoft Excel window

At the top of the window is the 'Name' bar it displays the program name and the sheet name on the left and on the right of this bar are the 'Window Size' icons.

Minimize Maximize Close

|  | $\backslash \quad$ - |
| :---: | :---: |
| 2 Microsoft Excel - Bookl | - $\square^{\text {\| }} \times$ |

If your window is not 'maximised' you will need to complete step 3 .
Step 3. Maximise the 'Microsoft Excel' window size so that it will take up the entire space of the screen.

## MAXIMISING A WINDOW



## a. Click on the Maximise icon located on the right of the Name bar

A spreadsheet design is made up of grids, with columns running across the screen and rows running down the screen. At the top and left of the sheet you have labels. Each cell is referenced by a column label and row label. (Example: B6, AB700, X45) There are 65,536 rows and 255 columns available in each spreadsheet.

The cursor specifies which cell you are currently in, it is displayed by a highlighted border.

|  | $A$ | $B$ | $C$ | $D$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  | B3 |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  | D5 |
| 6 |  |  |  |  |

The Main Menu bar contains all the functions of the Microsoft Excel program. Each menu name activates a pull-down menu containing a group of functions.
3. File Edit Yiew Insert Format Iools Data Window Help - X

Step 4. Activate the 'Edit' menu and view the functions on the pull-down menu.

## ACTIVATING A MENU

a. Click on the $\boldsymbol{E}$ in $\boldsymbol{E d i t}$
(Notice the E is underlined)
Step 5. Press the 'Right Arrow' key to move to the 'View' menu, study the functions available on the 'View' menu. (The Right Arrow key is located in the middle of the keyboard)

Step 6. Press the 'Right Arrow' key again to move to the 'Insert' menu, study the functions available on the 'Insert' menu.

Notice that on some menus an 'Extra Menu ' option appears at the end of the menu. If you point to this option with your mouse pointer you will be presented with additional functions on the current menu.


Step 7. Position your mouse pointer to the 'Extra Menu' option. Notice the 'Name' and 'Picture' options now appear on the menu, they have a small symbol on the right side which indicates that there is another menu attached to this option. Move the mouse pointer to the 'Name' option a menu will appear, view the menu. (Do not click)

Step 8. Move the mouse pointer down to the 'Picture' option and view its menu. (Do not click)
Step 9. Press the 'Escape key' to cancel this menu, (The Escape key is top left of your keyboard) press the 'Escape key' again to cancel the pull-down menu, press the 'Escape key' again to cancel the selection of the 'Insert' menu. (Notice it is highlighted slightly)

As well as having functions organised on the 'Main Menu' bar, you also have two toolbars called the Standard and Formatting toolbars, they contain graphical icons designed to run the most commonly used functions. These two toolbars may be displayed as one toolbar on your screen, if this is the case you will need to move the Formatting toolbar under the Standard toolbar otherwise you will spend too much time scrolling to find your icons.

MOVING A TOOLBAR (Only move the Formatting toolbar down under the Standard toolbar if you have only one toolbar on your screen)
a. Point your mouse pointer on the vertical line located at the beginning of the toolbar, your pointer will switch to two double-headed crossed arrows being the move symbol
b. Click-drag the toolbar down slightly into position
c. Release clicker

Beginning of Standard

Beginning of Formatting

- Microsoft Excel - Book1

Toolbar
图 File Edit Wiew Insert Format Iools Data Window Help


The Standard toolbar contains icons for many of the popular standard functions such as Save, Open, Print, Copy and Spellchecker. Icons are designed to make activating a function easy, as all you need to do is click on the icon. The graphics make the icon and function easily identifiable.


Step 10. Activate the 'Zoom' function and select $75 \%$ so we can view more cells on our sheet.
Scroll bar

## ZOOM

a. Click on the Zoom scroll bar located right of the Standard toolbar

* A menu will appear

100\%
b. Click on the $\mathbf{7 5 \%}$ from the menu provided

The Formatting toolbar contains format functions such as Bold, Underline, Colour, Left align, Centre align, Right align, Borders, Size, etc. These are commonly used formatting functions therefore they have been dedicated an icon.


Both toolbars can be customised so you may have some different icons on your toolbars than on the diagram above.

The Reference bar specifies which cell you are currently positioned in and it displays what is in the cell. In this diagram you are in cell B7 and in the cell is a formula that sums up the data that is in cells B3 to B5.


The Sheet and Scroll bars are at the bottom of the screen. The 'Scroll icons' allow you to scroll left and right of the current sheet, the 'Sheet tags' allow you to go to another sheet within the workbook. Each workbook has several spreadsheets within it, just like several pages to the one book. You can add more sheets to the workbook.

Step 11. Switch to 'Sheet2' and scroll to the right until you see column $X$.

## SWITCHING SHEETS

a. Click on the Sheet $2 \boldsymbol{t a g}$


Step 12. Switch back to 'Sheet1'. (Click on the Sheet1 tag)
There can be more toolbars displayed on the screen, the number of toolbars depends upon which toolbars are called to the screen. We will explore other toolbars later.

We will study moving around the cells of the spreadsheet.
Step 13. Currently you are in sheet 1 , cell A1, press the Right Arrow $\rightarrow$ key several times or hold the Right Arrow key down until you reach the column labelled 'BC'. The label is displayed at the top of the column. There are 255 columns across the screen the last one is labelled IV. Read the cell reference displayed left of the 'Reference bar' it should now be 'BC1'.

Level 1In many cases we will be using 'Shortcuts' to move around within our sheet, these Shortcuts are performed via the keyboard. This method of activating commonly used functions is quick and easy as you will not need to remove your hands from the keyboard to the mouse and you have more control. On your keyboard you have additional keys such as the Alt key, the Ctrl key, the Home key, the End key and arrow keys, take note of where they are positioned.

Step 14. Go to the first cell of the sheet, being cell A1, use the Shortcut for doing so.

## GO TO THE BEGINNING OF A SPREADSHEET (A1)

Ctrl+Home key
a. Hold down the Ctrl key (The Ctrl key is located at the bottom of your keyboard)
b. Press the Home key once (The Home key is located amongst the special keys)
c. Release both keys (Notice your cursor is now in cell Al)

Step 15. Press the 'Down Arrow' $\downarrow$ key until you reach row 10. The row label is displayed at the beginning of each row. Press the 'Page Down' key until you reach the row labelled 1000, the 'Page Down' key will take you down one full screen at a time. There are 65536 rows available to each sheet.

Step 16. Return to the top of the spreadsheet (A1) again using the Shortcut for doing so. (Hold down the Ctrl key, press the Home key once)

Step 17. Go to 'Sheet2'. (Click on Sheet2 tag)

Step 18. Go to cell C2000 using the 'Go To' function for doing so. It will take to long to use the arrow keys.

In this case we will use the menu method of activating a function so we can identify where the 'Go To' function is located within the menu system.

## GO TO

a. Click on Edit from the main menu
b. Click on Go To from the next menu
c. Enter C2000 into the reference area (Click in area and type)
d. Click on the $\boldsymbol{O K}$ button


Step 19. Move to the beginning of the current row (cell A2000) using the Shortcut for doing so.

## MOVE TO BEGINNING OF ROW

Home key
a. Press the Home key once
$\square$ Move to the beginning of the spreadsheet again. (Press Ctrl+Home)
Step 21. Go to 'Sheet1'. (Click on the Sheet 1 tag)
Step 22. Go to cell 'CU2100' using the reference toolbar.

## REFERENCE TOOLBAR

a. Click on the Reference scroll bar located top left of the screen
b. Enter the cell reference CU2100
c. Press Enter key to finalise


* Notice that you are currently in cell CU2100

Step 23. Move to the beginning of the spreadsheet again. (Press Ctrl+Home)
As you can see there are many cells within a sheet and there are many sheets within a workbook. As we have not entered anything into the sheet it remains empty. We will not be prompted to save the sheet as it is empty, however, if you have by mistake entered a character or number you will need to answer 'No' if the 'Save' message appears.

Step 24. Exit the 'Microsoft Excel' program.

## EXITING THE PROGRAM

a. Click on File from the main menu
b. Click on Exit from the next menu * You will return to the Windows desktop

## LESSON 2.

Step 1. Have your computer switched On and run the Microsoft Excel program. (Double-click on the Microsoft Excel icon or click on the Start button, move to Programs option, move to Microsoft Excel option and click on it)

Step 2. Type the column titles with the 'Caps Lock' key on as shown below to cells A1, B1 and C1.

## ENTERING TEXT INTO CELLS AND MOVING ACROSS

a. Type the text
b. Press the Right Arrow $\rightarrow$ key to move your cursor to the next cell on the right and to finalise your entry and close the cell (If your cell is not closed the icons on the toolbars become inactive)

|  | A | B | C |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | BILL | AMOUNT | PAID |

* Text is automatically aligned to the left of a cell, each cell has a default width of nine (9) character spaces. Column titles are generally positioned at the top of each column.
* Text is not embedded into the cell until you have moved the cursor out of the cell which closes the cell. If the cursor is inside the cell, it is opened, if a cell is opened you can not perform a function, so you must close the cell by either pressing an Arrow key or by pressing the Enter key.

Step 2. Enter the following row titles into cells A3, A4, A5 and A6.

## ENTERING TEXT INTO CELLS DOWN ROWS

a. Type the text
b. Press the down $\downarrow$ arrow key or press the Enter key (the cursor will move down on Enter)

* Row titles are generally located at the beginning of each row.

|  | A | B | C |
| :--- | :--- | :--- | :---: | :---: |
| 1 | BILL | AMOUNT | PAID |
| 2 |  |  |  |
| 3 | Gas |  |  |
| 4 | Electricity |  |  |
| 5 | Telephone |  |  |
| 6 | Rent |  |  |

Step 3. Enter the following numbers into cells B 3 to B 6 as shown below.

* Numerical entries are aligned to the right of the cells lining up the units, tens, hundreds and thousands.

|  | A | B | C |
| :--- | :--- | :--- | ---: | ---: |
| 1 | BILL | AMOUNT | PAID |
| 2 |  |  |  |
| 3 |  | 134.5 |  |
| 4 | Electricity | 114.3 |  |
| 5 | Telephone | 220.5 |  |
| 6 | Rent | 160 |  |

Step 4. Enter the following dates into cells C 3 to C 6 as shown below.

* Dates are also aligned to the right as they are actually numerical entries. Often calculations are performed on date entries. For example. Today's date plus seven days gives us a result. Today's date minus yesterdays date gives us a result. (We will be working with dates later)

* Numeric entries can have a variety of formats. For example: Percentage (15\%), Currency with two decimal places (\$15.00), Normal (15), etc.

When you wish to edit/change the format of more than one cell you must select the cells first so the Microsoft Excel program knows which cells you are referring to.

$\square$Select the cells B3, B4, B5 \& B6 as they contain numbers. (cells B3 to B6)

## SELECTING CELLS

a. Position your cursor on the first cell (B3) by clicking on it
b. Hold down the Shift key which is the select key (Keep holding the Shift key down)
c. Press the Down Arrow key until you reach cell B6

* Your cells should be highlighted in black specifying these cells are selected, the first cell in white indicates the location of your

|  | A | B |
| ---: | :--- | ---: |
| $\mathbf{1}$ | BILL | AMOUNT |
| $\mathbf{2}$ |  |  |
| $\mathbf{3}$ | Gas | 134.5 |
| $\mathbf{4}$ | Electricity | 114.3 |
| $\mathbf{5}$ | Telephone | 220.5 |
| $\mathbf{6}$ | Rent | 160 | cursor

d. Release all keys

Selecting is performed with a combination of the Shift key plus the Arrow keys or you can also click-drag the mouse pointer over the cells to select them, however be careful not to end up moving the cells instead of selecting the cells when using the click-drag method. Remember this as you will be regularly performing this function.

Step 6. Using the Increase icon, increase the decimal display to 2 decimal places for the numbers currently selected.

## INCREASING DECIMAL POSITION

a. Click on the Increase Decimal icon located on your Format toolbar


* The decimal position can be increased or decreased by simply clicking on the appropriate icon.

Step 7. Cancel the selection that is currently on.

## CANCEL A SELECTION

```
a. Press the Down or Up Arrow key or Click anywhere on the sheet
* The highlight is removed
```

Step 8. Select the cells B3, B4, B5 \& B6 again. (Position your cursor on the first cell (B3) by clicking on it, hold down the Shift key, press the Arrow key until you reach cell B6, release all keys)

Step 9. Increase the decimal display to '3 decimal places' for the numbers currently selected. (Click on the Increase Decimal icon once)

Step 10. Cancel the selection. (Press the Down Arrow key)
Often we may regret applying a function, lucky for us we have an 'Undo' function the will undo what we have just done.

$\square$Use the 'Undo' function to undo the increase of the decimal position to three.

UNDO
a. Click on the Undo icon located on the Standard toolbar


You can use the scroll bar and view the last functions performed

The 'Undo' function will undo the last function performed, it differs from the 'Escape key' as it cancels a menu selection. If you have gone through and performed a function that you did not really want to do, remember the 'Undo' function.

Currently all your work is stored in a temporary memory called 'Random Access Memory' (RAM). If the power source is turned off you will lose your work. We must save the sheet if we want to store it permanently.

If you are in a classroom situation ask your teacher which folder you should be saving your files to. We have created a folder on the C drive and called it 'Excel Lessons', we will be using this folder to save our files to, if you do not have a specified folder then you can save your files into the 'My Documents' folder.

Step 12. Save this spreadsheet into your folder and call the spreadsheet 'Lesson1'.

Saving a file is one of the most important functions, as it may have taken you some time to create your spreadsheet in the first place and you do not want to lose it.

## SAVING A FILE

a. Click on File from the main menu
b. Click on Save from the next menu
c. Click on the Save In scroll bar and select the disk drive of where your folder is located

* A list of folders and files belonging to the drive you have currently selected is displayed
d. Double-click on your folder from the list provided (ensure that the folder name is displayed in the Save in area to confirm your folder selection was successful)


Once a file has been saved the name will appear at the top of the screen on the 'Name' bar. All spreadsheets are given the extension XLS.

$$
\mathbb{X}_{\text {W Microsoft Excel - lessonl.xls }}^{\text {- } \square \boldsymbol{x}}
$$

A filename cannot contain the following characters. . / \| ? ( ) \{ \} [] or *
Step 13. The spreadsheet is now complete so we can close it as we no longer need it. It is best to close a sheet after you have finished with it, otherwise it will use up memory which can slow down the processing unit.

## CLOSING A FILE

a. Click on File from the main menu
b. Click on Close from the next menи

Currently you have no spreadsheet loaded in your working area. Try to type or enter some characters and you will soon discover that nothing happens.

Continue to the next lesson.

## LESSON 3.

Step 1. Use the 'New' function to call a new spreadsheet to the screen.

## NEW

a. Click on File from the main menu
or Click on the New sheet icon

b. Click on New from the next тепи

* The New window will appear and the Workbook icon is selected
c. Click on the $\boldsymbol{O k}$ button located at the bottom of the window
* A new sheet is presented within the Excel window area

Step 2. Enter only the column titles to cells B1 to E1 as
 shown below. (Type text, press Right Arrow key)

|  | A | B | $\mathbf{C}$ | D | E |
| :---: | :---: | :--- | :--- | :--- | :---: |
| $\mathbf{1}$ |  | JUNE | JULY | AUGUST | TOTAL |

$\square$ Return to cell A1 using the Shortcut for doing so. (Press Ctrl+Home)
Step 4. At this stage save your spreadsheet into your folder, call it 'Lesson2'.
a. Click on File from the main menu

b. Click on Save from the next menu
or click on the Save icon
c. Click on the Save In scroll bar and select the disk drive where your folder is located
d. Double-click on your Folder (ensure that your folder name is displayed in the Save in area)

* Notice that your previous file is listed

e. Click at the beginning of the Filename area the default name will be highlighted
$f$. Press the Delete key to delete the default name
g. Type Lesson 2 as the new filename
h. Click on the Save button to finalise
* Notice the filename is now displayed on the 'Name bar' at the top of the screen.

Step 5. Enter the row titles to cells A2 to A7. (Type text, press Enter key the cursor moves down)

|  | $\mathbf{A}$ |  |  |  |  |  | B | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{D}$ |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ |  | JUNE | JULY | AUGUST | TOTAL |  |  |  |  |  |
| $\mathbf{2}$ | MARY |  |  |  |  |  |  |  |  |  |
| $\mathbf{3}$ | TED |  |  |  |  |  |  |  |  |  |
| $\mathbf{4}$ | WILBA |  |  |  |  |  |  |  |  |  |
| $\mathbf{5}$ | SIMON |  |  |  |  |  |  |  |  |  |
| $\mathbf{6}$ |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{7}$ | TOTAL |  |  |  |  |  |  |  |  |  |

* Notice the cell reference above the sheet displays your cell reference and the cell content.
$\square$
Step 6. Move to cell A2 using the 'Cell Reference' area to do so.


## CELL REFERENCE AREA

a. Click on the Cell reference scroll bar located on the right side of the cell reference area
b. Enter the cell reference $\boldsymbol{A 2}$
c. Press the Enter key to finalise the entry

* Notice you are now in cell A2

$\square$ Edit the current entry using the 'Edit' function to do so. Change the text 'MARY' to 'MARY-JO'. The Edit function will open the cell and prompt the cursor inside the cell at the end of the data so we can delete, add or change what is in the cell.


## EDITING DATA WITHIN A CELL

a. Press the $\mathbf{F} \mathbf{2}$ key which positions the cursor at the end of the text within the cell
b. Type -JO
c. Press Enter key to finalise the entry and close the cell

Step 8. Move to cell A3 (Press Arrow keys), change the text from 'TED' to 'TAMMY'.

## EDITING AND DELETING DATA

a. Press the $\mathbf{F} \mathbf{2}$ key to edit the data in the cell
b. Press the Backspace key twice to delete the last two characters
c. Type AMMY
d. Press the Enter key to finalise and close the cell

Step 9. Enter the following numbers to the body of your spreadsheet as shown below.

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| ---: | :--- | :--- | :--- | ---: | :---: |
| $\mathbf{1}$ |  | JUNE | JULY | AUGUST | TOTAL |
| $\mathbf{2}$ | MARY-JO | 56.89 | $\mathbf{4}$ | 23.56 | 104.50 |
| $\mathbf{3}$ | TAMMY | 89.65 | 125.70 | 90.65 |  |
| $\mathbf{4}$ | WILBA | 76.45 | 32.67 | 87.98 |  |
| $\mathbf{5}$ | SIMON | 34.67 | 113.67 | 56.89 |  |
| $\mathbf{6}$ |  |  |  |  |  |
| $\mathbf{7}$ | TOTAL |  |  |  |  |

Step 10. Select the column titles in cells B1 to E1. (Click in cell B1 hold down the Shift key which is the selecting key, press the Right Arrow key three times, the cells should be highlighted in black except for the first cell as that is where your cursor is currently placed)

Step 11. Use the 'Center Align' function to place the column titles in the center of the cell.
There are 3 main cell alignments: Left, Centre and Right. They are located on the Formatting toolbar. The alignment function works within the individual cell.

## CENTRE ALIGN

a. Click on the Centre icon located on the Formatting toolbar


Cancel the selection. (Press the Down Arrow key or click anywhere on the screen)
Step 13. Move to cell E2 (Press Arrow keys), calculate the total for cell E2 using the 'Sum' formula.

The most famous feature of Excel is its ability to enter formulas to cells which calculates with cell references not actual numbers. All formulas entered into a cell must begin with the ' $=$ ' symbol to specify that it is a formula. In the formula detailed below it will sum the total of whatever is in the cells from B2 to D2 and place the answer in cell E2.

## SUM FORMULA

## =SUM(B2:D2)

a. Position your cursor in cell E2 (Click on it)

- this indicates the answer is to go here
b. Type $=\boldsymbol{S U M}$ (
- this is the sum formula
c. Move to cell D2 with your left arrow key
- this is the beginning of the range of cells
d. Hold the Shift key down and move to cell $\mathbf{B} 2$
- this selects the cells B2 to D2
* Notice a dashed border appear around the cells indicating these cells are selected.
e. Release the Shift key
- as we have finished selecting
f. Type )
g. Press the Enter key
- this specifies the end of the range you want to sum (Close bracket)
* The result of the formula is now displayed

Step 14. Move to cell E3 and enter a formula that will sum what is in cells B3 to D3. This time use the click-drag method for selecting the cells that are to be summed.
a. Position your cursor in cell E3 (Click in it) - this indicates the answer is to go here
b. Type $=\boldsymbol{S U M}$ (
c. Click-drag the mouse from cell B3 to D3
d. Type)
e. Press the Enter key

- this is the sum formula
- this selects the cells to sum
- finalise formula (Close bracket)
- finalise the entry

Step 15. Move to cell E4 and enter a formula that will sum what is in cells B4 to D4. (Repeat the above steps)

* As the 'Sum' formula is the most commonly used formula it has been dedicated an icon.

Step 16. Move to cell E5 and enter a formula that will calculate the 'Total', use the 'Autosum' icon for doing so.

The 'Autosum' function has a default setting that informs what cells are to be selected, it is not always correct. It generally sums numerical entries either horizontally or vertically, you must check that it is selecting the correct cells that you wish to sum. If it does not select the correct cells clickdrag your mouse pointer over the correct cells to tell it that these are the cells you wish to sum.

[^0]a. Position cursor in cell for answer $\mathbf{E 5}$ (Click in cell)
b. Click on the Autosum icon located on the Formatting toolbar

## $\Sigma$

c. Check if the cells it is selecting are correct

* If they are not correct, select the correct cells by click-dragging over the correct cells (B5 to D5)
d. Press the Enter key to finalise

Step 17. Calculate all the Totals for cells B7, C7, D7 and E7 using the 'Autosum' function.
Step 18. Select cells A7 to E7. (Click on cell A7, hold down the Shift key, press Right Arrow key until you reach $E 7$, release all keys)

Step 19. Apply the 'Bold' function to the select cells.

## BOLD

a. Click on the Bold icon
or press $\boldsymbol{C t r l}+\boldsymbol{B}$ (Shortcut)

## B

Step 20. Whilst the cells are still selected apply the 'Underline' function.

## UNDERLINE

a. Click on the Underline icon
or press $\boldsymbol{C t r l}+\boldsymbol{U}$ (Shortcut)

## U

Step 21. Cancel the selection. (Press Down Arrow key)
Step 22. Select the column titles (cells B1 to E1) and apply the 'Bold' function. (Repeat above steps)
Step 23. Cancel the selection. (Press Down Arrow key)
Step 24. Perform the 'Save' function to re-save all the new workings that you have added to the sheet called 'Lesson2', the save will update the relating file on the disk.

Remember what you have entered since the last save has not been updated to the disk, it is only entered onto the screen and held in the temporary memory (RAM). You will need to activate the 'Save' function to permanently store it onto the disk. When you perform the 'Save' function and the sheet already has a name it automatically updates the file stored on the disk, you will not be prompted to give the sheet a name as it already has one. This process is done very quickly, you may not notice it is done.

## RESAVE

a. Click on File from the main menu
or click on the Save icon

b. Click on Save from the next menu

* The resave is done very quickly you can view the progress at the bottom of the sheet
$\square$ Change the entry in cell A5 to read 'FRANK'.


## EDITING THE ENTIRE TEXT IN A CELL

a. Click on cell
b. Type new text

* The existing text will be overwritten

As there is generally little text in a cell, it is often easiest to overwrite the text, rather then to edit the cell, delete the text, re-enter the new text and close the cell.

Step 26. Edit the text 'Frank' and make it read 'Fred' use the 'Edit' function for doing so. (Position the cursor on the cell, press the F2 key, press the Backspace key to delete the last three characters, type the new text, press the Enter key to finalise the editing and to close the cell)

Step 27. Go to the top of the sheet being cell A1. (Press Ctrl+Home)
Being confident in using shortcuts for getting around, editing and deleting techniques can increase your speed when it comes to editing major sheets. Today speed is a major desired skill in the business place.

Step 28. Perform the 'Save' function again to resave the sheet and update the related file on the disk with the new entries. (Click on Save icon)

Step 29. The sheet is now complete and it has recently been saved, so we can close it. (Click on File from the main menu, click on Close from the next menu)

Step 30. View the last files you have created.

## VIEWING LAST FILES CREATED

a. Click on File from the main menu
b. Look at the end of the next menu and notice the last files displayed

Step 31. Cancel the File menu

## CANCELING A MENU

a. Press the Escape key once to cancel the pull-down menu
b. Press the Escape key again to cancel the File menu selection

Use the 'New' icon to call a new sheet to the screen. (Click on New icon)
Step 33. Set up the following sheet as shown below. Enter the Row titles, the Column titles and the numbers to the body area. Do not enter the amounts that are shaded as they are the result of the 'Sum' formula.

Step 34. Select the row titles (cells A2 to A7) (Click-drag over cells A2 to A7), apply the 'Bold' function. (Click on the Bold icon)

Step 35. Select the column titles (cells B1 to E1) (Click-drag over cells), apply the 'Bold' and 'Center' align functions. (Click on Bold icon, click on Center icon, press Down arrow key to unselect)

|  | A | B | C | D | E |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 |  | AUG | SEP | OCT | TOTAL |
| 2 | SALLY | 76 | 123 | 543 | $\mathbf{7 4 2}$ |
| 3 | SUE | 65 | 103 | 54 | $\mathbf{2 2 2}$ |
| 4 | ROBERT | 76 | 28 | 87 | $\mathbf{1 9 1}$ |
| 5 | PENNY | 87 | 99 | 98 | $\mathbf{2 8 4}$ |
| 6 |  |  |  |  |  |
| 7 | TOTAL | $\mathbf{3 0 4}$ | $\mathbf{3 5 3}$ | $\mathbf{7 8 2}$ | $\mathbf{1 4 3 9}$ |

Step 36. Use the 'Sum' formula to calculate the totals for column E and Row 7. (Position cursor in the cell which is to receive the result, enter the sum formula $=$ sum(, select the cells to sum by click-dragging over them, enter a close bracket) to specify the end, press the Enter key to finalise the formula)

Step 37. Select all the cells that contain a formula and apply the 'Bold' function. (Click on cell, click on Bold icon) or (Click-drag over a group of cells, click on Bold icon)

Step 38. Save the sheet and call it 'Practice-1'. (Click on File, Click on Save, Ensure your Folder is displayed in the Save In area, enter the filename Practice-1 into the Filename area, click on the Save button) Notice the filename on the Name bar, then close the sheet. (Click on File, click on Close)

Step 39. Exit the program.

## EXIT

a. Click on File from the main menu
b. Click on Exit from the next menu


## EXCEL STAGE ONE - LEVEL TWO

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## LESSON 4.

Step 1. Have your computer switched On and run the Microsoft Excel program. (Click on the Microsoft Excel icon, Start button, Programs option, Microsoft Excel option)

Step 2. Enter the following spreadsheet title into cell A1 "THE BLIND ASSOCIATION".
Step 3. Use the 'Merge and Center' function to create a spreadsheet title and to center the title between A1 and E1. This function is not the same as the 'Centre Align' function as it centres the text across multiple cells.

## MERGE AND CENTRE


a. Select cells A1 to E1 (Click-drag over cells A1 to E1)
b. Click on the Merge and Centre icon located center on the Formatting toolbar
c. Press Down Arrow key to cancel the selection

Step 4. Enter the column titles to cells B3 to E3 as shown below. Apply the 'Bold' and 'Centre' function to the column titles. (Select cells B3 to E3, click on Centre icon, click on Bold icon)

|  | A | B | C | D | E |
| :---: | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1}$ | THE BLIND ASSOCIATION |  |  |  |  |
| $\mathbf{2}$ |  |  |  |  |  |
| $\mathbf{3}$ |  | JAN | FEB | MARCH | TOTAL |
| $\mathbf{4}$ |  |  |  |  |  |
| $\mathbf{5}$ | WILBA JONES | 58 | 98 | 76 |  |
| $\mathbf{6}$ | MARY PARKER | 45 | 67 | 87 |  |
| $\mathbf{7}$ | SALLY EVANS | 23 | 43 | 45 |  |
| $\mathbf{8}$ | JOHN NEWMAN | 76 | 54 | 32 |  |
| $\mathbf{9}$ |  |  |  |  |  |
| $\mathbf{1 0}$ | TOTAL |  |  |  |  |

Step 5. Enter the row titles to cells 5A to 10A, notice that the text does not fit within the column width. After entering the text widen column A so the text fits the cell width.

## COLUMN WIDTH

a. Position the mouse pointer on the right side of the column label (between labels $A$ and $B$ )

* Notice the mouse pointer changes to two crossed double headed arrows which is the move symbol (You will be moving the column border to the right)
b. Click-drag to right until the text fits the cell then let go of the clicker

$\square$ Select the row titles in cells A5 to A10, apply the 'Center' function.

Step 7. Move to cell A1 using the Shortcut (Press Ctrl+Home), apply the 'Bold' function to the the spreadsheet title. (Click on Bold icon) Notice that the text is actually in cell A1 even thought it appears between cells A1 to E1.

Step 8. Now enter the numbers into the body area of the sheet which is between cells B5 to D8.
Step 9. Apply the 'Sum' formula and calculate the totals for column E. (Position cursor in cell, =sum(, select cells by moving to the first cell, hold down the Shift key and move to the last cell using the arrow keys, type ), press Enter key to finalise)

Step 10. Apply the 'Sum' formula and calculate the totals for row 10. (Repeat steps from above) (See results on page 22)

Step 11. Change the entry in cell B5 to 65 and notice the formula results change. (Click in cell, enter 65, press Enter key)

Step 12. Change the entry in cell B5 back to 58 using the 'Undo' function for doing so. (Click on the Undo icon) Notice the formula results have automatically recalculated.

Step 13. Save the spreadsheet calling it 'BA'. (Click on File, click on Save, ensure that your folder is selected, enter filename, click on Save button)

Notice that all your files (Spreadsheets) are listed in your folder.

Step 14. Close the sheet as we are finished with it. (Click
 on File, click on Close)

There are two main kinds of formulas. The formula where you wish to sum a group of cells often referred to as a range of cells and the formula is called a 'multiple cell formula'. where you wish to add, subtract, divide or multiply one cell with another which is called a 'single cell formula'.

Take note of the key strokes for the following, they are located on your numeric keypad which is on the right side of your keyboard:

| ADD | + | MINUS |
| :--- | :--- | :--- |
| MULTIPLY | - |  |

## REVISION QUESTIONS

Which two keys would you press to move the cursor to cell A1?
$\qquad$

Which key would you press to move the cursor to the beginning of the row?
$\qquad$

Which key is used in conjunction with the Arrow keys to select cells?
$\qquad$

What function do the following icons perform?

$\qquad$

What is the difference between the 'Centre' function and the 'Merge and Centre' function?

Which key performs the 'Edit; function?
$\qquad$

Prior to activating the 'Centre' function what must you do if you want to centre multiple cells?
$\qquad$

What character specifies that a formula is entered into the cell?
$\qquad$

What formula would you enter if you needed to sum all the entries between cells C 1 to C 15 ?
$\qquad$
In a formula what do the four symbols stand for?
$\qquad$ * $\qquad$
$\qquad$ $+$ $\qquad$
What two keys do you press to activate the 'Go To' function?
$\qquad$

How can you tell if a file has been saved?
$\qquad$

Why is it important to close a cell once you have entered text into it?
$\qquad$
$\qquad$
Under which main menu are the last files created listed?

## LESSON 5.

Step 1. Have your computer switched On and run the Microsoft Excel program. Open the file called 'BA'.

## OPEN A FILE

a. Click on File from the main menu
or Click on the Open icon

b. Click on Open from the next menu
c. Select the folder where the file is located it must be displayed in the Look In area
d. Click on the filename $\boldsymbol{B} \boldsymbol{A}$ from the listing supplied
e. Click on the Open button

Step 2. Add the row title and entries to row 11 as shown below. Add the row title to cell A12. (Do not enter numerical entries for row 12 as they are to be calculated using a formula)

Note: All cells that are shaded contain a formula that returns the result do not enter these numbers in manually. We entered them so you can check your results.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | THE BLIND ASSOCIATION |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  | JAN | FEB | MARCH | TOTAL |
| 4 |  |  |  |  |  |
| 5 | WILBA JONES | 58 | 98 | 76 | 232 |
| 6 | MARY PARKER | 45 | 67 | 87 | 199 |
| 7 | SALLY EVANS | 23 | 43 | 45 | 111 |
| 8 | JOHN NEWMAN | 76 | 54 | 32 | 162 |
| 9 |  |  |  |  |  |
| 10 | TOTAL | 202 | 262 | 240 | 704 |
| 11 | UNIT PRICE | 12.3 | 14.5 | 15.5 |  |
| 12 | TOTAL PRICE | 2484.6 | 3799 | 3720 | 10003.6 |

Step 3. Calculate the 'Total Price' for cell B12 by multiplying the 'Total' in cell B10 by the 'Unit Price' in cell B11.

## MULTIPLYING ONE CELL WITH ANOTHER

$=B 10 *$ B11
a. Position your cursor in cell B12 (Click in it)
b. Press =
c. Select cell B10 (Click on the cell)
d. Press*
e. Select cell B11 (Click on the cell)
f. Press the Enter key
-to specify where you want the answer -to indicate a formula is entered

- to multiply
-to finalise formula

Step 4. Calculate the 'Total Price' for cells C12 and D12. (Repeat the above steps)

$\square$
Calculate the 'Total' for cell E12 by summing B12 to D12. Use the 'Sum' formula. (Position cursor in E12, =sum(, select cells D12 to B12, ), press Enter key)

Step 6. Re-save the file to save all new changes. (Click on File, Click on Save)
If your file was not resaved after editing and you attempt to close it, Microsoft Excel will warn you and ask if you wish to save the file before closing it.

Step 7. Close the file as we have finished with it. (Click on File, click on Close)
At this stage you can exit out of the program and finalise your training or continue to the next lesson.

## LESSON 6.

Step 1. Have your computer switched On and run the Microsoft Excel program. Open the sheet 'BA' again. (Click on File, click on Open, click on BA, click on Open button) Enter the column titles as shown below replacing the existing text. (Click, Type)

Step 2. Select cells B5 to D8. (Click in cell B5, hold down the Shift key, press Right Arrow key to column D and Down Arrow key to row 8)

Step 3. Delete the selected entries and notice the formulas recalculate, then cancel the selection

## DELETING DATA

a. Press the Delete key
b. Press the Down arrow key to cancel the select function

Step 4. Enter the new entries to cells B3 to D8 as shown below. Notice the formulas recalculate.

|  | A | B | C | D | E |
| :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1}$ | THE BLIND ASSOCIATION |  |  |  |  |
| $\mathbf{2}$ |  |  |  |  |  |
| $\mathbf{3}$ |  | APRIL | MAY | JUNE | TOTAL |
| $\mathbf{4}$ |  |  |  |  |  |
| $\mathbf{5}$ | WILBA JONES | 103 | 289 | 612 | $\mathbf{1 0 0 4}$ |
| $\mathbf{6}$ | MARY PARKER | 425 | 540 | 376 | $\mathbf{1 3 4 1}$ |
| $\mathbf{7}$ | SALLY EVANS | 487 | 269 | 644 | $\mathbf{1 4 0 0}$ |
| $\mathbf{8}$ | JOHN NEWMAN | 209 | 412 | 403 | $\mathbf{1 0 2 4}$ |
| $\mathbf{9}$ |  |  |  |  |  |
| $\mathbf{1 0}$ | TOTAL | $\mathbf{1 2 2 4}$ | $\mathbf{1 5 1 0}$ | $\mathbf{2 0 3 5}$ | $\mathbf{4 7 6 9}$ |
| $\mathbf{1 1}$ | UNIT PRICE | 12.3 | 14.5 | 15.5 |  |
| $\mathbf{1 2}$ | TOTAL PRICE | $\mathbf{1 5 0 5 5 . 2}$ | $\mathbf{2 1 8 9 5}$ | $\mathbf{3 1 5 4 2 . 5}$ | $\mathbf{6 8 4 9 2 . 7}$ |

We have edited the spreadsheet called 'BA'. What you have changed on your screen has not been saved to the relating file on your disk so the original file remains unchanged on the disk. You now have two choices; you can re-save this file and it will update the original file on the disk, or you can close the file and not save the changes so the original file stays unchanged.

Step 5. Close the file without saving it as we do not want to update the original with these changes.

## CLOSING A FILE WITHOUT SAVING ANY UPDATES

a. Click on File from the main menu
b. Click on Close from the next menu

* A message will appear
c. Click on the No button as we do not with to save the changes

Step 6. Open the sheet 'BA' this time use the file listing on the 'File' menu. (Click on File, click on 'BA.xls' located at the end of the menu)

Step 7. Notice the information on your sheet is as it was prior to the previous editing. Close the file. (Click on File, click on Close)

Continue to the next lesson from this point.

## LESSON 7.

Step 1. Call a new sheet (Click on New icon), enter the text 'MACDONALD'S FARM' to cell A1, select cells A1 to E1 and apply the 'Merge and Center' function. (Have cells selected, click on Merge and Centre icon)

Step 2. Enter the following text as shown below. Widen column A (Click-drag the column border out), apply the 'Bold' and 'Centre' functions to the column titles. (A4 to D4)

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | MACDONALD'S FARM |  |  |  |  |
| $\mathbf{2}$ |  |  |  |  |  |
| $\mathbf{3}$ |  |  |  |  |  |
| $\mathbf{4}$ | ANIMALS | QTY | PRICE | TOTAL |  |
| $\mathbf{5}$ |  |  |  |  |  |
| $\mathbf{6}$ | KANGAROOS |  |  |  |  |
| $\mathbf{7}$ | RABBITS |  |  |  |  |
| $\mathbf{8}$ | HORSES |  |  |  |  |
| $\mathbf{9}$ | EMUS |  |  |  |  |
| $\mathbf{1 0}$ |  |  |  |  |  |
| $\mathbf{1 1}$ | TOTAL |  |  |  |  |

$\square$ Move to cell A1 (Press Ctrl+Home key), increase the size of the spreadsheet title to 18 .

## SIZE

a. Position cursor in cell $\mathbf{A 1}$ as the text is actually in this cell
b. Click on the Size scroll icon located on the Formatting toolbar
c. Click on 18 (You may need to scroll down to the 18)

* Notice the text is larger

Step 4. Enter the following numbers into the body of your spreadsheet
 as shown below.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | MACDONALD'S FARM |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  | > |  |  |  |
| 4 | ANIMALS | QTY | PRICE | TOTAL |  |
| 5 |  | $\bigcirc$ |  |  |  |
| 6 | KANGAROOS | 54 | 155.6 |  |  |
| 7 | RABBITS | 67 | 17.8 |  |  |
| 8 | HORSES | 83 | 350 |  |  |
| 9 | EMUS | 29 | 650 |  |  |
| 10 |  |  |  |  |  |
| 11 | TOTAL |  |  |  |  |
| 12 |  |  |  |  |  |

Step 5. Select cells C6 to D11 (Click on cell C6, hold down the Shift key and press the Down Arrow key until your reach D11), add the 'Currency' format to the selected cells.

## CURRENCY

a. Click on the Currency icon located on the Formatting toolbar

* Notice that the decimal position automatically converted to 2 .

Each cell has a default width of nine character spaces, should an entry be larger than nine characters (or larger than the cell width) a hash symbols \#\#\#\#\# will appear. The program is informing you that the column is not wide enough and it will needing widening. If this happens to you widen the column width. (Position cursor between column labels the cursor changes, then click-drag out)
$\square$ Whilst the cells D6 to D11 are still selected, decrease the decimal position to 1 . (Example: \$15.0)

## DECREASE DECIMAL POSITION

a. Click on the Decrease Decimal icon


Step 7. Calculate the 'Total' for cell D6. Multiply the 'Qty' (B6) by the 'Price' (C6). Use the following formula shown below. (Increase the column width should a cell indicate that it is not wide enough)

## MULTIPLYING ONCE CELL WITH ANOTHER

a. Position the cursor in D6
b. Press the $=$
c. Move to the Qty being cell B6
d. Press*
e. Move to the Price being cell C6
f. Press the Enter key

- to specify where you want the answer to appear
- to indicate that this cell contains a formula
- to select first cell
- to specify that you wish to multiply
- to select second cell
- to finalise the formula

When you need to 'move to a cell' you can use either the 'Arrow key 'or you can 'click in the cell'.
Notice the formula reference on the formula bar reads $=$ B6*C6, we are calculating cells not numbers. If an entry is changed in either of the cells Excel will automatically recalculate the formula. This ensures that the answer to the formula is always correct.

Step 8. Change the entry in cell B6 to read 75, when you press the Enter key notice the 'Total' result change.

Step 9. Calculate the 'Totals' for the rest of the animals in column D by multiplying their 'Qty' with the 'Price'. (Repeat above steps)

Now you should be getting good at using 'single cell formulas' and the 'Sum' formula.
Step 10. Calculate the 'Totals' for row 11 using the 'Sum' formula. (Click in the cell that needs the result, type $=$ sum(, select cells, type ), press Enter key)

Step 11. Apply the 'Bold' function to all the cells that contain a formula. (Select cells by click-dragging over them, click on Bold icon)

Step 12. Apply the 'Underline' function to all cells in row 11. (Select cells, click on Underline icon)
Step 13. Close the spreadsheet without saving it. (Click on File, click on Close, click on No when the Save message appears) All that hard work gone!

## LESSON 8.

## Step 1. Create the following spreadsheet on your own.

* Adjust column widths where necessary
* Merge and centre the spreadsheet title and set the size to 20
* Centre column titles
* Add a Currency symbols to the numerical entries for the 'Price' and 'Totals'.
* All shaded cells are calculated with a formula do not manually enter the amounts. For the 'Totals' in column D , use a single cell formula ( $\mathrm{B}^{*} \mathrm{C}$ ) (remember to press the $=$ first to indicate that this is a formula cell reference)
* Calculate the 'Totals' for row 11 using the 'Sum' formula. ( =sum( Select cells, ), Enter key)

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | MACDONALD'S FARM |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 | ANIMALS | QTY | PRICE | TOTAL |  |
| 5 |  |  |  |  |  |
| 6 | ELEPHANTS | 64 | \$1990.00 | \$127360 |  |
| 7 | DONKEYS | 68 | \$90.00 | \$6120 |  |
| 8 | CAMELS | 40 | \$150.00 | \$6000 |  |
| 9 | DOGS | 94 | \$35.00 | \$3290 |  |
| 10 |  |  |  |  |  |
| 11 | TOTAL | 266 | \$2265.00 | \$142770.00 |  |
| 12 |  |  |  |  |  |

Generally you never print a page unless you have Print Previewed it first. The Print Preview function will display how the sheet would look printed on a piece of paper. You will also discover that margins and often headers and footers are included on a page.

Step 2. Print preview the spreadsheet so you can see what it will look like printed.

## PRINT PREVIEW

a. Click on the Print Preview icon located on the Standard toolbar
 or
a. Click on File from the main menu
b. Click on Print Preview from the next menu

* The Print Preview window will appear displaying your sheet
$\square$ Use the 'Zoom' function to view the spreadsheet in more detail.


## ZOOM

a. Click on the Zoom button located at the top of the screen


Step 4. Use the 'Zoom' function to view the whole sheet. (Click on the Zoom icon again)
Step 5. Display the margins on the sheet.

## MARGINS

a. Click on the Margins icon located a the top of the screen

Step 6. Close the 'Print Preview' window.

## CLOSE A PRINT PREVIEW

a. Click on the Close button located at top/right of the window

Step 7. Save the file into your folder and call it 'FARM', then close the file. (File, Save, select your folder, enter the filename Farm, Save button) (File, Close)


Step 8. Activate the 'File' menu and activate the extra menu to see if your file 'Farm' is displayed at the end of the menu, then cancel the menu. (Press Escape key)

Step 9. Exit out of the Microsoft Excel program. (Click on File, Click on Exit)

## EXCEL STAGE ONE - LEVEL THREE

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## LESSON 9.

Step 1. Set up the following spreadsheet. (Where cells are shaded they are calculated with a formula, do not enter any numbers manually into these cells)

* Adjust the column widths where necessary
* Apply the bold, underline and centre functions where necessary
* Select cells B4 to F11 and increase the decimal position to 2 for all numerical entries
* Sum the totals for column F using the 'Autosum' function

|  | A | B | C | D | E | F |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1}$ |  | January | April | July | October | Total |
| $\mathbf{2}$ |  |  |  |  |  |  |
| $\mathbf{3}$ | Quarterly Expenses |  |  |  |  |  |
| $\mathbf{4}$ | Gas | 144.50 | 135.60 | 155.60 | 178.90 | $\mathbf{6 1 4 . 6 0}$ |
| $\mathbf{5}$ | Electricity | 121.58 | 155.69 | 79.47 | 114.78 | $\mathbf{4 7 1 . 5 2}$ |
| $\mathbf{6}$ | Telephone | 258.76 | 312.49 | 279.90 | 189.75 | $\mathbf{1 0 4 0 . 9 0}$ |
| $\mathbf{7}$ | Rent | 1200.00 | 1200.00 | 1200.00 | 1200.00 | $\mathbf{4 8 0 0 . 0 0}$ |
| $\mathbf{8}$ |  |  |  |  |  |  |
| $\mathbf{9}$ | Yearly Expenses |  |  |  |  |  |
| $\mathbf{1 0}$ | Car Insurance | 350.00 |  |  |  | $\mathbf{3 5 0 . 0 0}$ |
| $\mathbf{1 1}$ | Personal Insurance | 440.00 |  |  |  | $\mathbf{4 4 0 . 0 0}$ |

Step 2. Decrease the decimal position of all numerical entries by one.
a. Select cells from B4 to F11
b. Click on the Decrease Decimal icon


Step 3. Undo the last function which was to decrease by one decimal position. (Click on the Undo icon) Notice the decimal position increases by one.

Step 4. Undo the last function which was to Undo the last function. (Click on the Undo icon) Notice the decimal position decreases by one.

Step 5. Save the file and store it in your folder, call the file 'EXPO2002'. (Click on File, click on Save, select folder, enter filename EXP02002, click on Save button) Close the sheet.

At this stage you can finalise your training or continue to the next lesson.

## LESSON 10.

Step 1. On a new sheet set up the following spreadsheet shown below, adjust column widths and centre align column titles.

Step 2. After entering all the text, select the entire sheet being all the cells of the sheet.

## SELECTING AN ENTIRE SHEET

a. Click in the top left corner of the sheet and all cells will become highlighted


Step 3. Set the size to 9 for all cells of this sheet.

* If the size you need is not available on the size menu, you can manually enter the desired size.


## SIZE

a. Click at the beginning of the current number in the Size icon area
b. Press Delete key to delete the current number
c. Enter the number 9

Step 4. Format the numerical entries for columns C, D, E and F so the have a 'Currency' format. (Select cells C5 to F12, click on Currency icon)

|  | A | B | C | D | E | F |
| :---: | :--- | ---: | ---: | ---: | ---: | :---: |
| 1 |  |  |  |  |  |  |
| 2 | NAMES | UNITS | PRICE | GROSS | TAX 27\% | NET |
| 3 |  |  | PER UNIT |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | WENDY | 54 | $\$ 15.89$ |  |  |  |
| 6 | MICHELLE | 77 | $\$ 13.46$ |  |  |  |
| 7 | DAVID | 89 | $\$ 13.00$ |  |  |  |
| 8 | PETER | 102 | $\$ 34.80$ |  |  |  |
| 9 | MICHAEL | 37 | $\$ 27.68$ |  |  |  |
| 10 | WAYNE | 46 | $\$ 15.80$ |  |  |  |
| 11 |  |  |  |  |  |  |
| 12 | TOTAL |  |  |  |  |  |
| 13 |  |  |  |  |  |  |

$\square$
At this stage save the file into your folder and call it 'Unit1'. Often it is wise to perform the 'Save' function prior to trying something new out. Simply to avoid losing the work already completed.

Step 6. Add a thick line to the bottom of row 3, (to all cells A3 to F3). Use the menu method for doing so.

## ADDING LINES

a. Select cells from A3 to F3
b. Click on Format from the main menu
c. Click on Cells from the next menu
d. Click on the Border tag
e. Click on the Thick line display in the Style area
f. Click on the Bottom Border in the Border area or click on the Bottom border icon
g. Click on the $\boldsymbol{O k}$ button


The Format window is very popular as it contains functions such as borders, number formats, cell alignments, fonts, patterns and other format functions that can be applied to data and cells.

Step 7. Add the same thick line to the bottom of row 12, cells A12 to F12 using the 'Repeat' function to do so.

## REPEAT LAST FUNCTION

a. Select cells from A12 to F12
b. Click on the Edit from the main menu or Press $\boldsymbol{C t r l}+\boldsymbol{Y}$
c. Click on Repeat from the next menu

The difference between the 'Redo' and the 'Repeat' functions are : the 'Redo' function will only redo something that has been undone, that is if the Undo function has been applied. The 'Repeat' function will repeat the last function performed.
$\square$ Calculate the 'Gross' for each person in column D. The formula will work on the 'Units multiplied by the Price Per Unit'. In this exercise 'Gross' represents 'Gross Wage'.

* View the diagram on the next page for the results


## MULTIPLY FORMULA

a. Move to cell D5 (Click in it)
b. Press $=\quad$ - to activate the single formula
c. Move to B5 (Click in it)
d. Press * - to specify multiplication
e. Move to $\mathbf{C 5}$ (Click in it)
f. Press the Enter key

Step 9. Calculate the 'Tax' for each person in column E. The formula will work on the 'Gross*27\%'. Yes! you can enter fixed numbers to a formula.

## PERCENTAGE FORMULA

a. Move to cell $\mathbf{E 5}$ (Click on it)

$$
=D 5 * 27 \%
$$

b. Press $=$
c. Move to D5 (Click on it)
d. Type $* 27 \%$ - to multiply with 27 percent
e. Press the Enter key

Step 10. Calculate the 'Net' for each person in column F. The formula will work on the 'Gross minus the Tax'.

## MINUS FORMULA

a. Move to cell $\mathbf{F 5}$ (Click in it)
b. Press $=$
c. Move to cell D5 (Click in it)
d. Press -
e. Move to cell E5 (Click in it)
f. Press the Enter key

Step 11. Calculate the 'Total' for row 12 using the 'Autosum' function. (Click in the cell that is to contain the result, click on Autosum icon, ensure the correct cells are selected, press Enter key)

|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |
| 2 | NAMES | UNITS | PRICE | GROSS | TAX 27\% | NET |
| 3 | PER UNIT |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | WENDY | 54 | \$15.89 | \$858.06 | \$231.68 | \$626.38 |
| 6 | MICHELLE | 77 | \$13.46 | \$1,036.42 | \$279.83 | \$756.59 |
| 7 | DAVID | 89 | \$13.00 | \$1,157.00 | \$312.39 | \$844.61 |
| 8 | PETER | 102 | \$34.80 | \$3,549.60 | \$958.39 | \$2,591.21 |
| 9 | MICHAEL | 37 | \$27.68 | \$1,024.16 | \$276.52 | \$747.64 |
| 10 | WAYNE | 46 | \$15.80 | \$726.80 | \$196.24 | \$530.56 |
| 11 |  |  |  |  |  |  |
| 12 | TOTAL | 405 | \$120.63 | \$8,352.04 | \$2,255.05 | \$6,096.99 |

Step 12. Print Preview the sheet. (Click on Print Preview icon)
Step 13. Zoom-in on the Print Preview. (Click on Zoom button)
Step 14. Zoom-out on the Print Preview. (Click on Zoom button)
Step 15. Cancel the Print Preview screen. (Click on Close button)
Step 16. Resave the sheet and close it.
At this stage you can exit the program or continue to the next lesson.

## LESSON 11.

We need another spreadsheet with the same layout as the previous sheet 'UNIT1'. To avoid having to recreate the spreadsheet we will open 'UNIT1' and save it to another name which will make it an entirely new sheet as it will be named differently. We edit the new sheet as needed and resave it. When you save a spreadsheet to another name it performs the same function as copying the entire file.

Step 1. Switch On your computer and run the Microsoft Excel program. Open the file called 'UNIT1'. (Click on File, click on Open, click on Unit1, click on Open button)
$\square$ Apply the 'Save As' function and save this sheet to another name. Call the new sheet 'Unit2'.

## SAVE FILE AS ANOTHER FILE

a. Click on File from the main menu
b. Click on Save As from the next menu
c. Enter the new filename 'UNIT2' to the Filename area
d. Click on the Save button

* Notice the new filename on the Name bar at the top left of the window

Step 3. Change the 'Units' amounts as shown below (column B), notice all the formulas recalculate.

|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |
| 2 | NAMES | UNITS | PRICE | GROSS | TAX 27\% | NET |
| 3 |  |  | PER UNIT |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | WENDY | 67 | \$15.89 | \$1,064.63 | \$287.45 | \$777.18 |
| 6 | MICHELLE | 89 | \$13.46 | \$1,197.94 | \$323.44 | \$874.50 |
| 7 | DAVID | 44 | \$13.00 | \$572.00 | \$154.44 | \$417.56 |
| 8 | PETER | 56 | \$34.80 | \$1,948.80 | \$526.18 | \$1,422.62 |
| 9 | MICHAEL | 73 | \$27.68 | \$2,020.64 | \$545.57 | \$1,475.07 |
| 10 | WAYNE | 98 | \$15.80 | \$1,548.40 | \$418.07 | \$1,130.33 |
| 11 |  |  |  |  |  |  |
| 12 | TOTAL | 427 | \$120.63 | \$8,352.41 | \$2,255.15 | \$6,097.26 |

Step 4. Add a thick line to the right of cells A4 to A12.

## ADDING RIGHT LINES

a. Select cells A4 to A12
b. Click on Format from the main menu
c. Click on Cells from the next menu

* The Format Cells window appears
d. Click on the Borders tag at the top of the window
$e$. Click on the Right border icon in the Border area
f. Click on the Thick line in the Style area
g. Click on the $\boldsymbol{O K}$ button

[^1]$\square$
Check that both files are there by viewing the files listed on the 'File' menu. (Click on File, view the bottom listing of files) Notice 'Unit1.xls' and 'Unit2.xls' are displayed.

Step 7. Cancel the menu. (Press the Escape key)
At this stage you can exit out of the program and finalise your training or continue to the next lesson.

## LESSON 12.

Microsoft Excel can also be used as a calculator.
Step 1. Run Microsoft Excel and be positioned on a new sheet.
Step 2. Calculate in a single cell, this formula : $75 * 98$
a. Press $=$
b. Enter $\mathbf{7 5 * 9 8}$
c. Press the Enter key

Step 3. Calculate each formula and enter the answer. (Remember to press $=$ first)
$78+97+54-55$
$7 * 8 * 3$
$100 / 7$
160-5
25000 * $25 \%$ $\qquad$ ( $=25000 * 25 \%$ )
$15 \%$ of 90000
$(55+89)-(2 * 4)$
$(66+75) * 33$
$(6+9+7+8) / 4$
Step 4. Close the file and do not save it. (Click on File, click on Close, click on No)

## LESSON 13.

Step 1. Create the following spreadsheet. The shaded cells are calculated with a formula. (Do not enter the answer manually). The sales tax is calculated by the quantity of items multiplied by the price of each item which gives us the total price, then multiply the total price by the tax rate. (The formula is described in the next step.)

|  | A | B | C |
| :---: | :---: | ---: | ---: |
| $\mathbf{1}$ | QTY | PRICE | SALES TAX |
| $\mathbf{2}$ |  |  | $15 \%$ |
| $\mathbf{3}$ | 9 | 15 | $\mathbf{2 0 . 2 5}$ |
| $\mathbf{4}$ | 5 | 65 | $\mathbf{4 8 . 7 5}$ |
| $\mathbf{5}$ | 6 | 72 | $\mathbf{6 4 . 8}$ |
| $\mathbf{6}$ | 12 | 13.8 | $\mathbf{2 4 . 8 4}$ |

Step 2. Calculate the 'Sales Tax' for column C, working on the (Qty * Price) * Sales Tax Rate.
In this formula we need the total of the Qty * Price before we multiply it with the Sales Tax rate. So we must enter appropriate brackets to specify what is to be multiplied first.
a. Position cursor in C3 (Click in it)
b. Type $=($
c. Move to cell A3 and press *
d. Move to cell B3 and type )

$$
=(\mathbf{A} 3 * \mathbf{B} 3) * \mathbf{C} 2
$$

e. Press*
f. Move to $\boldsymbol{C} \mathbf{2}$
g. Press the Enter key

Step 3. Save this sheet and call it 'Loan rate 15\%'.
Step 4. As you still have the 'Loan rate 15\%' opened, perform the 'Save As' function and call the new sheet 'Loan rate 17\%'. (Click on File, click on Save As, enter new name 'Loan Rate $17 \%$, click on Save button) Notice the filename displayed on the Name bar.

Step 5. Change the interest rate from $15 \%$ to $17 \%$ and notice the formulas recalculate.
(Simply enter $17 \%$ in cell C2) Perform the 'Save' function to sae the new entries to disk.
Step 6. Delete the entries to cells A3 to B6. (Select cells A3 to B6, Press Delete key) Notice all the results for the 'Sales Tax' become 0 .
$\square$ Undo the last function which was the delete. (Click on the Undo icon)

Step 8. Select the entire sheet. (Click on the top left corner of the sheet, before the column and row labels, the entire sheet should be selected)

Step 9. Apply the 'Italics' function to all the selected cells.

## ITALICS

a. Click on the Italics icon located on the Formatting bo

Step 10. Select the entire row 1.
SELECTING AN ENTIRE ROW
a. Click on the row label 1 area

* The entire row becomes selected


Step 11. Apply the 'Underline' function. (Click on Underline icon)

Step 12. Perform the 'Save' function to resave the changes to the file on the disk.
Step 13. Go to 'Sheet 2'. (Click on Sheet2 tag)


[^2]
## REVISION QUESTIONS

What formula would you enter if you wanted to multiply cell B6 with B7?

Which key would you press to delete what is in a cell?

What function do the following icons perform?

## 虫


$\qquad$
$\qquad$


How would you add a thick bottom borders to a group of cells?

Why would you save a file to another name?

What does the 'grey empty label' located top left of the sheet do when it is clicked upon?

What does the double-click between the column labels do?
$\qquad$

How do you select an entire row?


[^0]:    * Instructions on next page

[^1]:    Step 5. Now that you have made changes to the sheet apply the 'Save' function to resave the sheet with the changes and close it.

[^2]:    Step 15. Go to 'Sheet1', (Click on Sheetl tag). Perform the 'Save' function to resave the sheet, then close the sheet.

