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Introduction To Spreadsheet - Assignment 1

You are going to use a spreadsheet to calculate your monthly personal expenditure.

1. Start the spreadsheet application by double clicking the **Microsoft Office** Folder, then double click **Microsoft Excel**.

2. In the top left corner of the spreadsheet (You should be in cell **A1**) type in the heading PERSONAL EXPENDITURE

3. Leave a blank line after the heading and type the following data (Type in cell A3). You can use the mouse to **click** into the cell where you want to type *or* use the **direction keys**.

Microsoft Excel – Book 1

	A	B	C	D	E	F	G	H
1	**PERSONAL**							
2								
3	GAS							
4	ELECTRIC							
5	RENT							
6	W. RATES							
7	COUNCIL TAX							
8	PHONE BILL							
9	FOOD							
10	CLOTHES							
11	SOCIAL LIFE							
12	**TOTAL**							

4. Start typing the figures in the second column. (Start typing in cell **B3**) Make up the figures. They do not have to be real life! Format the cells as **Currency**.

5. Save the file onto your floppy disk, so click the **File** menu, click **Save As**. Look at the box next to where it says **Save in**: click the down arrow and you will see a list. Choose **3 ½ Floppy (A:).**
   Now click in the box next to where it says **File name**: Type a name for the work and then click the **Save** button.

6. Make sure that all the data fits inside the columns.

   If the data does not fit you must widen the column - To do this; move the mouse ***between*** the column labels **A and B**. Hold down the mouse arrow when you see the **double arrow**. Drag to new position.

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7. **Delete the row** for phone bill. (It was cut off last week). To do this; **highlight the row** by clicking on the row label called **8** (Note: the first cell will not look highlighted. It will stay a white colour).

   Now click the **Edit** menu and then click **Delete**.

8. Now you must use a formula to add up the column of numbers.

   a/ Use the mouse or direction keys to move to cell **B11**. Type the following.

   =SUM(

   b/ **Highlight** the numbers that you want to add up.
   Make sure that you highlight carefully. **Do not** include the cell where the answer will be.

   c/ Type a right hand bracket. Like this **)**

   d/ Press **Enter**.

9. Save the changes by clicking the **Save** tool at the top of the screen. (Picture of a floppy disk).

10. Print the file by clicking the **Print** tool at the top of the screen. (Picture of a printer).

11. Close the file by clicking the **File** menu and then **Close**.

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Introduction To Spreadsheet - Assignment 2

1. Start the spreadsheet program. If the program is already open, click the **File** menu and then click **New**.

2. In the top left corner of the spreadsheet (You should be in cell **A1**) type the heading My Expenses

3. Leave a blank line after the heading and type the following data (in cell A3). Use the mouse to **click** into the cell where you want to type *or* use the **direction keys**.

	A	B	C	D	E	F	G	H
1	**My Expenses**							
2								
3	**FOOD**	**March**	**April**	**May**	**June**	**July**	**August**	**Sept**
4	**CAT FOOD**							
5	**BREAD**							
6	**SOUP**							
7	**VEGETABLES**							
8	**MILK**							
9	**EGGS**							
10	**CHEESE**							
11	**TINS**							
12	**TOTAL**							

Remember: **Words** go to the **left** of a cell, **numbers** to the **right**.

4. Notice that when you type words into the spreadsheet, they will go to the left of the column. When you type numbers into the spreadsheet they will go to the right of the column. **You must** line up the words and the numbers.

   Highlight the month names), click the **Align Right** tool at the top of the screen.

5. Enter values for each product across the range of months, make them up. Remember; they do not have to be real life!

6. Add the total costs for March. You will need to use a formula. Follow the instructions below.

   a/ Use the mouse or direction keys to move to cell **B12**. Type the following.

   =SUM(

   b/ Now **highlight** the numbers that you want to add up.
   Make sure that you highlight carefully. **Do not** include the cell where the answer will be.

   c/ Type a right hand bracket. Like this **)**

d/ Press **Enter**.

Repeat this across the range.

7. Save and print the file. See your spreadsheet instructions if you can't remember how to do this.

8. Delete the row for CAT FOOD. (The cat moved out!). To do this; **highlight the row** by clicking on the row label called **4**.
Now click the **Edit menu** and then click **Delete**.

9. Change the figures to currency. **Highlight** the cells by dragging the mouse across all the numbers. Click the **Currency tool** at the top of the screen. (It has a picture of money on it).

10. Make sure that the headings and numbers still fit inside the columns. Widen the columns if necessary. **To widen columns**: move the mouse ***between*** the column labels (A, B, C, D etc.). When you see the **double arrow** drag to new position.

11. Use a formula to add up the item and grand totals for your cosy winter.

12. Check, Save and Print

13. In cell **I11** use a formula to add up your average spend over the 7 months. Click the cursor in **I12**, **type =AVERAGE(** then click on the Total for March, type a colon **:** then click on the Total for Sept, type a closed bracket **)**. Press **Enter.**

14. Change all the total numbers and the average number to Integer (whole numbers) do this by clicking on your **Decrease Decimal** button on the tool bar until no decimal points are visible.

15. Check, Save and Print

16. Produce a second printout showing the formula you have used. Go to **Tools**, then **Options**, on the bottom left of the box that appears you will see a check box with formulas next to it, click in the box and click **OK**. Then print as usual.

17. Close down the file.

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Introduction To Spreadsheet - Assignment 3

You are going to calculate the weekly takings from a market stall.

1. Start the spreadsheet program. Include a **Header** (with your Name, Unit number 2.06 and Date) and a **Footer** (with the name of your file and a page number). Also change the paper orientation to Landscape (click on **File**, then **Page**, make sure **Paper Size** is at the front of the box and click on **Landscape**

2. Type in the heading MARKET STALL

3. Key in the following information and make up some figures for the spreadsheet.

	A	B	C	D	E	F	G	H	I
1	**MARKET STALL**								
2									
3	**ITEM (excl VAT)**	**2/8/99**	**3/8/99**	**4/8/99**	**5/8/99**	**6/8/99**	**7/8/99**	**Total**	**Total incl VAT**
4	**BOOTS**								
5	**JUMPERS**								
6	**GLOVES**								
7	**WOOLLY HATS**								
8	**W. TIGHTS**								
9	**LONG JOHNS**								
10	**RAINMACS**								
11	**OTHERS**								
12	**Day Totals**								

4. Check the spreadsheet thoroughly, Save the file and Print

5. Delete the row entitled OTHERS.

6. Move LONG JOHNS so it is the first item on the list

7. Format the Dates on the row so they are displayed like this 2-Aug-99. Highlight all the Date Cells, click **Format**, **Cells**, make sure that **Number** is displayed on top and then click **Date**, on the right find the **Type**: which is like the one above, click it and then click **OK**

8. Use a formula to calculate the total for 2-Aug-99. You should be in cell **B11**.

9. Copy this formula for the other days of the week. **To copy a formula**: Click the mouse onto the cell to be copied (**B11**) and then drag the mouse across the cells where you want to copy the answers. I.e. **Drag** the mouse from cell **B11** to cell **G11**. Now click the **Edit** menu and then click **Fill** and then click **Right**.

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10. Now use a formula to calculate the total for each of the items. Type the first formula in cell **H4**.

11. Copy this formula for the other items. **To copy a formula**: Click the mouse onto the cell to be copied (**H4**) and then
drag the mouse down to where you want to copy the answers. I.e. **Drag** the mouse from cell **H4** to cell **H10**.
Now click the **Edit** menu, click **Fill** and then **Down**.

12. Check, Save and print the spreadsheet.

13. Now use a formula to calculate the sales plus 17.5% VAT. Place cursor in **I4**, then type **=**, now click on the cell with the total for LONG JOHNS. Click ***** and type **117%**, press **Enter**. This will calculate the VAT at 17.5% and then add the Total for the item back onto that amount.

14. Copy the formula for each item in the list. (see point 11 for instructions).

15. Insert a new row called BED SOCKS between jumpers and gloves. **To insert a row**: highlight the row **under** where the new one
will be (the **Gloves** row), so click **row label 6**. Click the **Insert** menu and then click **Rows**.

16. Type the following figures in the BED SOCKS row. 27 36 98 0 46 77

17. You will need to add up the numbers in the BED SOCKS row. You can do this by copying the formula.
To copy a formula: Click the mouse onto the cell to be copied (**H5**) and then drag the mouse down to **H6**.
Click the **Edit** menu, click **Fill** and then **Down**.

18. Change the format to Currency. **Highlight** the cells and click on the **Currency button** on the tool bar

19. Check, Save the spreadsheet and Print

20. Print the spreadsheet formulas. **To print formulas**:
a/ Click the **View Formula** tool or use the menu option as outlined earlier.
b/ **Print** the spreadsheet as normal.
c/ When you have printed the file, click the **Hide Formula** tool or use the menu option as outlined earlier. The formulas will disappear.

21. Close the file.

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Introduction To Spreadsheet - Assignment 4

You are going to use a spreadsheet make sure you understand different formulas.

1. Start the spreadsheet program. Create a new document. Include a **Header** (with your Name, Unit number 2.06 and Date) and a **Footer** (with the name of your file and a page number). Also change the paper orientation to Landscape (click on **File**, then **Page Setup**, make sure **Paper Size** is at the front of the box and click on **Landscape**

2. In the top left corner of the spreadsheet (You should be in cell **A1**) type in the heading FORMULA EXAMPLES

3. Leave a blank line after the heading and type the following data (Type in cell A3). You can use the mouse to **click** into the cell where you want to type *or* use the **direction keys**. Type in the data below for CONFERENCE EXPENSES.

	A	B	C	D	E	F
1	**FORMULA EXAMPLES**					
2						
3	CONFERENCE EXPENSES					
4	NAME	MILEAGE	ROOM	MEALS	HOTEL	
5	J. RADICE	197	30	15		
6	C. BOOTH	137	30	15		
7	B. BUSH	100.75	50	3.5		
8	C. DYSON	618	65	3.5		
9	**TOTAL**					
10						
11						
12						

4. In Hotel cell for J. RADICE, insert a formula that adds together ROOM and MEALS

5. Replicate this formula for the other interviewees

6. In the TOTAL Row and the HOTEL column insert a formula to add the total cost of the Hotel Bill.

7. Check, Save and Print your work.

8. Format MILEAGE in Integer format. Format other numerical cells as Currency

9. Insert a 3 new columns between MILEAGE and ROOM. Give them the following headings TRAVEL, ADVANCE, TRAVEL TOTAL. Widen columns as necessary and format all three columns as currency.

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10. In J. RADICE's row and TRAVEL column insert a formula which calculates mileage expenses if the company pays the participant 35 pence per mile travelling costs.

11. Each participant has received an advance. Type these figures in the ADVANCE column

J. RADICE	£20.00
C. BOOTH	£20.00
B. BUSH	£15.00
C. DYSON	£30.00

12. In TRAVEL TOTAL insert a formula which subtracts the advance the participant received from the figure in the TRAVEL column (use only cell references not amounts). Copy the formula for all other conference participants

13. Check, Save and Print your work

14. Insert a formula in the TOTAL row which calculates total amounts for TRAVEL TOTAL, ROOM and MEALS

15. In I9 insert a formula which calculates the whole TOTAL row

16. In H11 type in Discount. J. RADICE had to share a twin room with another participant, insert a formula in F11 which divides J. RADICE's Room by 2, this will give you the amount of discount.

17. In H12 type Amount Payable. In I12 insert a calculation which subtracts the discount form the Grand Total (in I9).

18. Check, Save and Print your work.

19. In A12 type Average Mileage. In column B insert a formula which calculates this. Check, Save and Print two versions. One showing values, one showing formulas.

20. Close your file.

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Introduction To Spreadsheet - Assignment 5

You are going to use a spreadsheet to create different kinds of charts.

1. Start the spreadsheet program. Create a new document. Include a **Header** (with your Name, Unit number 2.06 and Date) and a **Footer** (with the name of your file and a page number). Also change the paper orientation to Landscape (click on **File**, then **Page Setup**.

2. In the top left corner of the spreadsheet (You should be in cell **A1**) type in the heading COURSE NUMBERS

3. Enter the following Data

	A	B	C	D	E	F
1	**COURSE NUMBERS**					
2						
3	Course	Term 1				
4	CLAIT	10				
5	Telework	17				
6	MUWIC	18				
7	Beginners Photoshop	8				

4. **Highlight** all the data from row 4 to 7. Don't include the column headings

5. Click on the **Chart button** on the Toolbar

6. In Chart Type: Click on **Column**. In Chart Sub Type: click on the first example.

7. Click **Next**, then check the example on the screen and if it is **OK**, press **Next** again

8. In **Chart Title**: Type in Course Numbers. In **Category (x) axis:** Type in Courses. In **Value (y) axis:** Type in Numbers.

9. Click on the **Legend Tab** and click the check box so you don't see the legend (Legends are used if you do not use Categories).

10. Click on **Data Labels** and click **Show Value**. Click **Next**.

11. Click on **As new sheet** and give the chart a name

12. Click **Finish**.

13. Insert a Header and Footer as usual into the new sheet that has been created for your chart.

14. Check, **Save** and **Print**.

15. Click back on Sheet1 to show your original data.

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16. Make sure that the same data is highlighted and click on the Chart button again.

17. Click on **Pie** in the Chart type: list. Click **Next**.

18. Click **Next** again.

19. Click on **Titles** and give your pie chart a suitable Title.

20. Click on **Data Labels** and then click on **Show label and percent**. Click **Next**

21. Click on **As new sheet** and give the chart a name

22. Click **Finish**.

23. Insert a Header and Footer as usual into the new sheet that has been created for your chart.

24. Check, **Save** and **Print**.

25. Now go back to Sheet1 which holds your original data and add the following data.

	A	B	C	D	E	F
1	**COURSE NUMBERS**					
2						
3	Course	Term 1	**Term 2**	**Term 3**		
4	CLAIT	10	**8**	**18**		
5	Telework	17	**20**	**18**		
6	MUWIC	18	**16**	**10**		
7	Beginners Photoshop	8	**8**	**10**		

26. You are now going to create a Line Graph which shows the course numbers for CLAIT over the three terms.

27. **Highlight** the whole of the CLAIT row

28. Click on the **Chart button** on the Toolbar

29. In **Chart Type**: Click on Line. In **Chart Sub Type:** click on the first example.

30. Click **Next**, then check the example on the screen and if it is OK, press **Next** again

31. Click on **Titles Tab**. Enter a Name for the Line chart. Click on **Category (x) axis** and enter Terms. Click on **Value (y) axis** and enter Numbers.

32. Explore some of the other options on this screen and see what happens to your result.

31. When you have finished experimenting click Next.

32. Click on **As new sheet** and give the chart a name

33. Click **Finish**.

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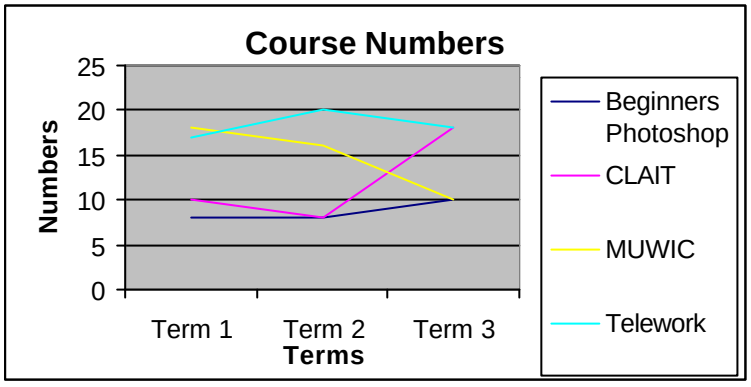
34. Insert a Header and Footer as usual into the new sheet that has been created for your chart.

35. **Check**, **Save** and **Print**.

36. Sort course data into alphabetical order by **Highlighting** data including column headings, row headings and numbers, click on **Data** and then **Sort**, Click **OK**. **Save** and **Print** the spreadsheet.

37. Now go back and check your bar and pie chart. What has changed?

38. Now from what you have done previously create a Line Chart of all the courses over three terms, so it looks something like this



Tip

In the Chart Wizard - page 2 or 4 - Chart Source Date click Rows rather than columns.

Why do you need to do this?

39. **Check**, **Save** and **Print** all you work.

40. Answer the following questions about Charts

Chart Type	**Look at the type of data you have been using for these exercises and discuss in pairs when and why you would use different types of charts. Give some examples.** **E.g. which chart is best if you are looking at trends (e.g. population over time). Which chart is best if you want to compare items, and which one is best if you want to show proportions (e.g. how many trainees went onto other courses/got a job after training?)**
Bar or column Charts 	
Pie Charts 	
Line charts 	

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Introduction To Spreadsheet - Assignment 6

You are going to use a spreadsheet to perform Logical Functions. So far you have used a spreadsheet to perform Arithmetic functions, i.e. adding columns, multiplication etc. Logical functions allow you to show a number or text if a condition you specify meets your requirements. An Example will make it clearer!

1. Start the spreadsheet program. Create a new document. Include a **Header** (with your Name, Unit number 2.06 and Date) and a **Footer** (with the name of your file and a page number). Also change the paper orientation to Landscape (click on **File**, then **Page Setup**

2. Type in the following data

	A	B	C	D	E	F
1	**Project Budget**					
2						
3	Budget	1500				
4	**Item**	**£'s**				
5	Staff Costs	960				
6	Stationery	120				
7	Printing Costs	325				
8	**Total**					
9	**Status**					

3. Insert a formula in B8 which calculates the total amount spent

4. In B9 insert the following formula.

   =IF(B8>B3,"Over Budget","OK")

   Make sure your, **commas, brackets (sometimes called parentheses() and inverted commas"** are in the correct places or the formula will not work.

   This formula is saying, if the figure in B8 which is the total spent is more than the figure in B3, which is the Budget, then return the text Over Budget, if not return the text OK.

5. Increase printing costs to 500, what appears in the Status cell now?

6. Check, **Save** and **Print** your work.

Introduction To Spreadsheet - Assignment 7

1. Start the spreadsheet program. Open up the Spreadsheet called TraineeMarks.xls (get this file from your tutor).

2. In column E insert a formula to calculate the average for the first trainee. Copy the formula for the other trainees. Format the averages as integers.

3. In **Pass?** column insert a logical formula which tells you Yes if the mark is 45 and above No if below.

   Your formula should look like this **=IF(E3>44,"Yes","No")**. Study the formula, do you understand it, why does it say 44 and not 45? What comparison operator would you use if you wanted to insert the number 45?

   Insert the formula for the first trainee and copy down the column for the rest.

4. In the Grade column we need to insert a logical formula which gives the following grades

Grade	Score
A	70+
B	60-69
C	45-59

   This formula is a little different from the one above because we have more than one `condition', we have three.

   Would you have come up with the following answer?

   =IF(E3>69,"A",IF(E3>59,"B",IF(E3>44,"C","F")))

   Read the formula from left to right, it states that

   a. if the figure in E3 (the average mark) is more than 69, i.e. 70+ then give a grade A. If this is not true,

   go to the next condition

   b. if the figure in E3 is greater than 59 i.e. 60-69, then give a grade B

   If neither a. or b. is true then the calculation will go onto the next condition

   c. if E3 is greater than 44 (i.e. 45- 59), give a grade C.

   If none of these apply give grade F, (Poor Charlotte she was only 1 away from a C!)

   Why are there three parentheses (brackets) at the end of the formula?

   Insert the formula for the first trainee and copy it down to the remaining trainees.

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5. **Check**, **Save** and **Print** your work (showing the formula). Experiment with this formula, devise a new grading system which gives, Distinction, Merit, Pass, Fail with a pass mark of 40.