

Simple Arithmetic Data			
Value 1	4		
Value 2	2		
Add	6		
Subtract	2		
Multiply	8		
Divide	2		

Simple Arithmetic Data			
Value 1	4	2	6
Value 2	2	1	3
Add	6	3	9
subtract	2	1	3
Multiply	8	2	18
Divide	2	2	2

Holiday Costs					
	Vienna	Budapest	Paris	Rome	Geneva
Travel Costs					
Hotel	960	400	400	740	800
Flight	250	200	105	220	185
Airport Taxes	25	20	29	33	18
Sub Total	1235	620	534	993	1003
Additional Costs					
Personal Insurance	35	25	18	10	42
Car Hire	560	240	470	360	290
Petrol	90	80	75	80	65
Travellers Cheques	300	450	500	200	150
Sub Total	985	795	1063	650	547
Grand Total	2220	1415	1597	1643	1550

WEEKS	NEWSPAPER	RETAIL \$	SOLD	TOTAL SELL
1ST	TIMES OF INDIA	6	20	120
2ND	TELEGRAM	6	23	138
3RD	TIMES OF INDIA	6	22	132
4TH	HINDUSTAN TIMES	8	46	368
5TH	THE INDIAN EXPRESS	8	45	360
6TH	THE MORUNG EXPRESS	8	66	528
7TH	TIMES OF INDIA	6	87	522
8TH	TIMES OF INDIA	6	56	336
9TH	HINDUSTAN TIMES	10	90	900
10TH	THE INDIAN EXPRESS	8	90	720
11TH	THE INDIAN EXPRESS	8	87	696

Task 1

In this exercise you will create basic formulae involving simple calculations on a pair of values. The sums involved are intentionally simple to allow you to check that your answers are correct using a little mental arithmetic.

Enter the data shown opposite into a new blank workbook. Leave the cells containing the word formula empty for now:

1. Enter a formula to add together the contents of cells B3 and B4. Place the result in B6.

2. Enter a formula to subtract the contents of cells B4 from B3. Place the result in cell B7.

3. Enter a formula to multiply the contents of cell B3 by B4. Place the result in cell B8.

4. Enter a formula to divide the contents of cell B3 by B4. Place the result in B9.

5. Do a quick check that your answers are correct, then save the file as maths.xls in the intro-formulae

Task 2:

Open the maths.xls workbook created in the previous exercise and go to Sheet 1.

1. Modify the worksheet by adding two new sets of values as shown below in cells C3, C4, D3, and D4.

2. Copy each of the formulae in column B to columns C and D.

3. Click in cell C6 and check that the formula is correct (when you click in the cell you will see the formula rather than the result). It should be =C3+C4.

4. Check that the copied formulae have done what you needed using a bit of mental arithmetic.

5. Save and close the workbook.

Exercise 2: Holiday costs

1. Create a new worksheet as shown below:

2. Enter a formula in cell B8 to calculate the Sub Total of the Travel Costs. When you have entered this formula and are confident that it is correct, copy the formula to the other cells in the row (i.e. cells C8:F8).

3. Enter a formula in cell B16 to calculate the Sub Total of the Additional Costs. Copy this formula to cells C16:F16.

4. Enter a formula in cell B18 to calculate the Grand Total. Copy this formula to cells C18:F18.

5. Save the file as holiday.xls in the r:\training.dir\excel\intro-formulae-functions folder.

Exercise 3: Newspaper sales

1. Open the workbook: news.xls.

This worksheet shows details of the volume of different newspapers sold over a period of 15 weeks together with the retail price of each of the newspapers available.

2. To improve the layout of the worksheet, insert a row between rows 9 and 10.

3. The data for Weeks 3 and 4 has been duplicated in error. Delete these two extra rows (i.e. rows 15 and 16).

4. Enter a formula to add up the number of Newspapers Sold over the 15 weeks.

5. In cell B27 use the AutoSum icon.

6. In cell C27 try typing the formula manually.

7. Check that the formula is correct and then copy it to the remaining columns.

8. Enter a formula in cell B28 to calculate the Total Sales using the retail prices given.

Total Sales = Newspapers Sold * Retail Price

Project B

Exercise 3

12TH	TELEGRAM	6	88	528
13TH	HINDUSTAN TIMES	10	78	780
14TH	HINDUSTAN TIMES	10	88	880
15TH	TIMES OF INDIA	6	90	540

TOTAL NUMBER OF NEWSPAPER SOLD OVER THE 15 WEEKS				
15 WEEKS TOTAL SOLD		976		

WEEKS	NEWSPAPER	RETAIL \$	SOLD	TOTAL SELL
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12TH	TELEGRAM	6	88	528
13TH	HINDUSTAN TIMES	10	78	780
14TH	HINDUSTAN TIMES	10	88	880
15TH	TIMES OF INDIA	6	90	540
			AVERAGE	503.2
			MAXIMUM	900
			MINIMUM	120

Exercise 1

Petty Cash records					
	Coffee	Milk	Postage	Stationery	Weekly Total
Week1	4.3	2.5	3	15	24.8
Week2	3.5	1.9	5	22	32.4
Week3	0	3	4	5	12
Week4	0	2.8	2.5	5	10.3
Monthly Total	7.8	10.2	14.5	47	79.5
Yearly Estimate	93.6	122.4	174	564	954

Exercise 4

- Exercise 1: Petty cash
- Open the petty.xls workbook from the r:\training.dir\excel\intro-formulae-functions folder.
 - Apply a currency format with two decimal places to the data where appropriate.
 - Insert a row between rows 1 and 2 and remove the blank row 4.
 - Enter formulae to calculate the Weekly Total for each of the weeks.
 - Week 3 has been omitted in error. Insert a row and add the following data:
Milk Postage Stationery
Week3 3.00 4.00 5.00
 - Copy the formula to this row.
 - Enter the formula to calculate the Monthly Total for each item.
 - During some weeks coffee is also purchased. Insert a new column between Milk and Postage, and enter the heading Coffee, with the following data:
 - Copy the formulae for this column.
 - You have been asked to give a rough estimate of the total yearly out-going of petty cash. Insert a new label below Monthly Total called Yearly Estimate. Insert a formula in cell B9 to multiply the Monthly Total for Milk by 12. Copy this formula across the remainder of the cells in this row.
 - Enter a label Grand Total in cell A10. Now SUM the Yearly Estimate row to calculate the grand total for the year. Place this total in cell B10.
 - Format the font to Comic Sans MS 12pt.

- (Note: make sure you use the appropriate retail price for each newspaper.)
- Hint: If you are unclear how to create this formula, try substituting the relevant cell references into the formula exactly as it is given. For example, to calculate the Total Sales of The Chronicle use the formula:
- Total Sales = Newspapers Sold * Retail Price
becomes: = B27*B3
9. Copy the formula in cell B28 to cell C28.
- What happens? (Check the formula in cell C28).
10. Manually enter the correct formula into each of the cells C28:H28.
11. Save the worksheet with the new name news1.xls and close the file.
12. How would you consider changing the layout of this worksheet so that all formula could be copied

- Exercise 4 – Newspaper Sales
- Open the workbook news1.xls that you created in a previous exercise.
 - Some simple statistical analysis (i.e. the average, minimum and maximum sales) is required for each of the newspapers. Insert the labels:
Average
Minimum
Maximum
after the Total Sales label in rows 30, 31 and 32 respectively.
 - Enter a formula to calculate the Average, Min and Max values for each of the different newspapers. Try:
 - using the function wizard
 - typing the formula yourself.
 (Take care not to include the calculated values Newspapers Sold and Total Sales.)
 - Using the function wizard find yourself a suitable function to automatically return the current date. Insert this function in cell H1.
 - Save the worksheet as news2.xls and close it.

Grand Total	1908
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13. Make the text in the row and column headings bold.
14. Set the width of each column to approximately width: 12.00.
15. Format the text in column A so that it wraps within the cells.
16. Centre the heading across columns A to F.
17. Add a heavy border around the outside of the table – apart from the heading i.e. A3:F10. Add horizontal lines between the rows containing the summary data (Monthly Total, Yearly Estimate and Grand Total).
18. Add a header to the worksheet to include the filename in the centre portion. Add a footer to include the date on the right, and your name on the left.
19. Centre the data both vertically and horizontally on the page, for printing.
20. Select to print row and column headings.
21. Print the worksheet and save it with the same name petty.xls.

Items	Price	Number Sold				Total Sold	Sales	Sales in Euro
		Week 1	Week 2	Week 3	Week 4			
Mars Bar	0.29	55	72	65	70	262	75.98	45.588
Snickers	0.32	38	62	44	59	203	64.96	38.976
Fuse	0.3	122	54	98	84	358	107.4	64.44
KitKat	0.29	98	115	90	101	404	117.16	70.296
Bounty	0.34	65	83	65	79	292	99.28	59.568
Wisper	0.31	48	52	35	67	202	62.62	37.572
Total Sold per week		426	438	397	460	1721	527.4	316.44

Min Week 1	Min Week 2	Min Week 3	Min Week 4
38	52	35	59
Max Week 1	Max week 2	Max Week 3	Max week 4
122	115	98	101

Min Sold	Max Sold
62.62	117.16

1. Create a worksheet as shown below to record confectionery sales in the student refectory. The prices are given in British pounds.

2. Save the worksheet as sweets.xls in the r:\training_dir\excel\intro-formulae-functions folder.
3. Create a formula in the Total Sold column to calculate the total of each type of bar sold.
Total Sold = number sold in week 1 + number sold in week 2 + number sold in week 3 + number sold in week 4
4. Create a formula in the Sales column to calculate the sales value of each type of chocolate bar sold.
Sales = Total Sold * Price
5. In the row Total Sold per Week, create a formula to calculate the total number of chocolate bars sold per week.
Total Sold per Week = Mars Bars + Snickers + Fuse + KitKat + Bounty + Wispa
6. Add two new rows at the bottom of the worksheet and label them Minimum Sold and Maximum Sold.
Create formulae in these rows to calculate the minimum chocolate bars sold per week and the maximum chocolate bars sold per week.
7. Format the figures in the column Price to currency with two decimal places, and the figures in the column Sales as integer (no decimals). Make all column titles bold.
8. Add one column to the right of the table, with the title: Sales in Euros.
9. Using the exchange rate 1 GBP = 0.60 EURO. (The prices shown in the worksheet are expressed in GBP).
Create a formula to calculate Sales in EMU for each chocolate bar in the column.
Sales in EMU = Sales * Exchange Rate (0.6)
10. Create a header with the text: College Confectionery Sales.
11. Print a copy of the worksheet.
12. Save the worksheet with the same name, sweets.xls and close it.