



# Obedience Lessons

Autumn 2013

**Session 5 – Excel**

# Recap on Last Session

## Using Tables in WORD

# In Word 2003 click **Table** > **Formula**

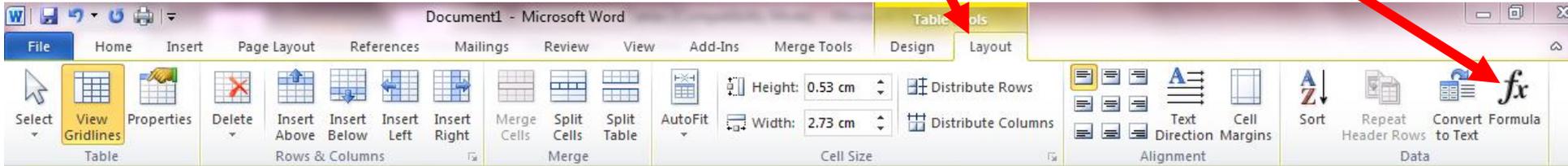
The screenshot shows the Microsoft Word 2003 interface. The 'Table' menu is open, and the 'Formula...' option is highlighted. A red circle is drawn around the 'OK' button in the 'Formula' dialog box. The dialog box contains the following text:

Formula:  
=SUM(ABOVE)  
Number format:  
Paste function: Paste bookmark:  
OK Cancel

The background shows a table with the following values in the first column:

55			
43			
21			

# In Word 2010 **Table** > **Layout** > **Formula**



55					
43					
21					

Formula

Formula:  
=SUM(ABOVE)

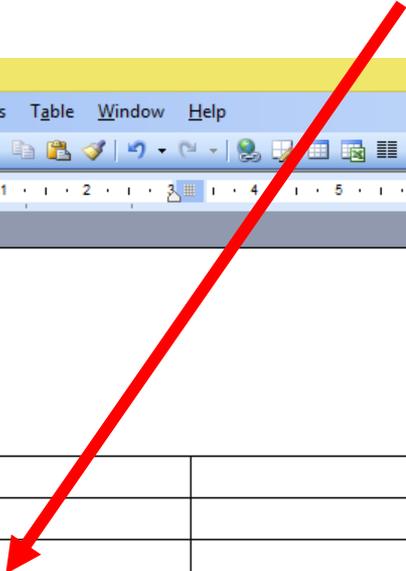
Number format:  
[Dropdown]

Paste function:  
[Dropdown]

Paste bookmark:  
[Dropdown]

OK Cancel

# Total is calculated



55				
43				
21				
119				

# Updating Cell Contents

Word does not automatically update the results when you change the data in a cell

To update cells do one of the following: -

1. Select a cell and press **F9**
2. Select all cells (**Ctrl A**) and press **F9**
3. Close the file and open it again

# Example - Calculating a paper bill

Paper	No.	Price (£)	Weekly
Independent	5	£1.40	
N.D. Journal	1	£1.00	
Sunday Times	1	£2.00	
Radio Times	1	£1.60	
Telegraph	5	£1.20	
Time	1	£2.89	
TOTAL:			

Set formula to **=PRODUCT(LEFT)**

Formula

Formula:  
=PRODUCT(LEFT)

Number format:  
£#,##0.00;(£#,##0.00)

Paste function: Paste bookmark:

OK Cancel

Set format to £

Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	
Sunday Times	1	£2.00	
Radio Times	1	£1.60	
Telegraph	5	£1.20	
Time	1	£2.89	
TOTAL:			

**Highlight the result then Ctrl C (Copy)**



Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	
Sunday Times	1	£2.00	
Radio Times	1	£1.60	
Telegraph	5	£1.20	
Time	1	£2.89	
TOTAL:			

**Highlight the cells below then Ctrl V (Paste)**



Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	£ 7.00
Sunday Times	1	£2.00	£ 7.00
Radio Times	1	£1.60	£ 7.00
Telegraph	5	£1.20	£ 7.00
Time	1	£2.89	£ 7.00
TOTAL:			

**Then press Ctrl E (Centre) and then F9 (update)**

Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	£ 1.00
Sunday Times	1	£2.00	£ 2.00
Radio Times	1	£1.60	£ 1.60
Telegraph	5	£1.20	£ 6.00
Time	1	£2.89	£ 2.89
TOTAL:			

# Select the cell for the total and insert a formula

Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	£ 1.00
Sunday Times	1		£ 2.00
Radio Times	1		£ 1.60
Telegraph	5		£ 6.00
Time	1		£ 2.89
TOTAL:			I

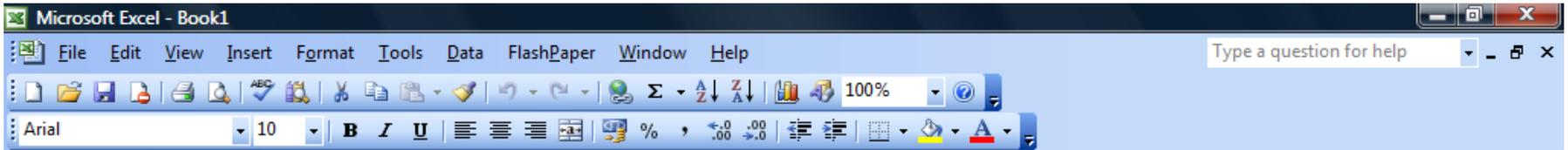
**Formula** ✕

Formula:

Number format:

Paste function:  Paste bookmark:

Paper	No.	Price (£)	Weekly
Independent	5	£1.40	£ 7.00
N.D. Journal	1	£1.00	£ 1.00
Sunday Times	1	£2.00	£ 2.00
Radio Times	1	£1.60	£ 1.60
Telegraph	5	£1.20	£ 6.00
Time	1	£2.89	£ 2.89
TOTAL:			£ 20.49

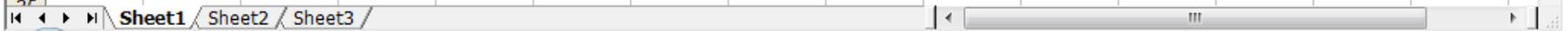


# Using Microsoft Excel



Today you will  
begin to ....

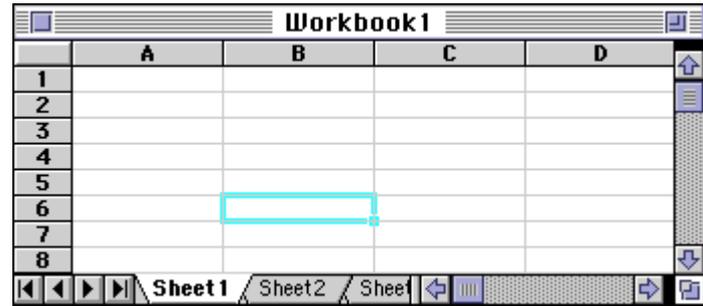
**EXCEL!**



# Reminder

Spreadsheets are made up of : -

- 1) columns
- 2) rows
- 3) cells



In each cell there may be the following types of data :-

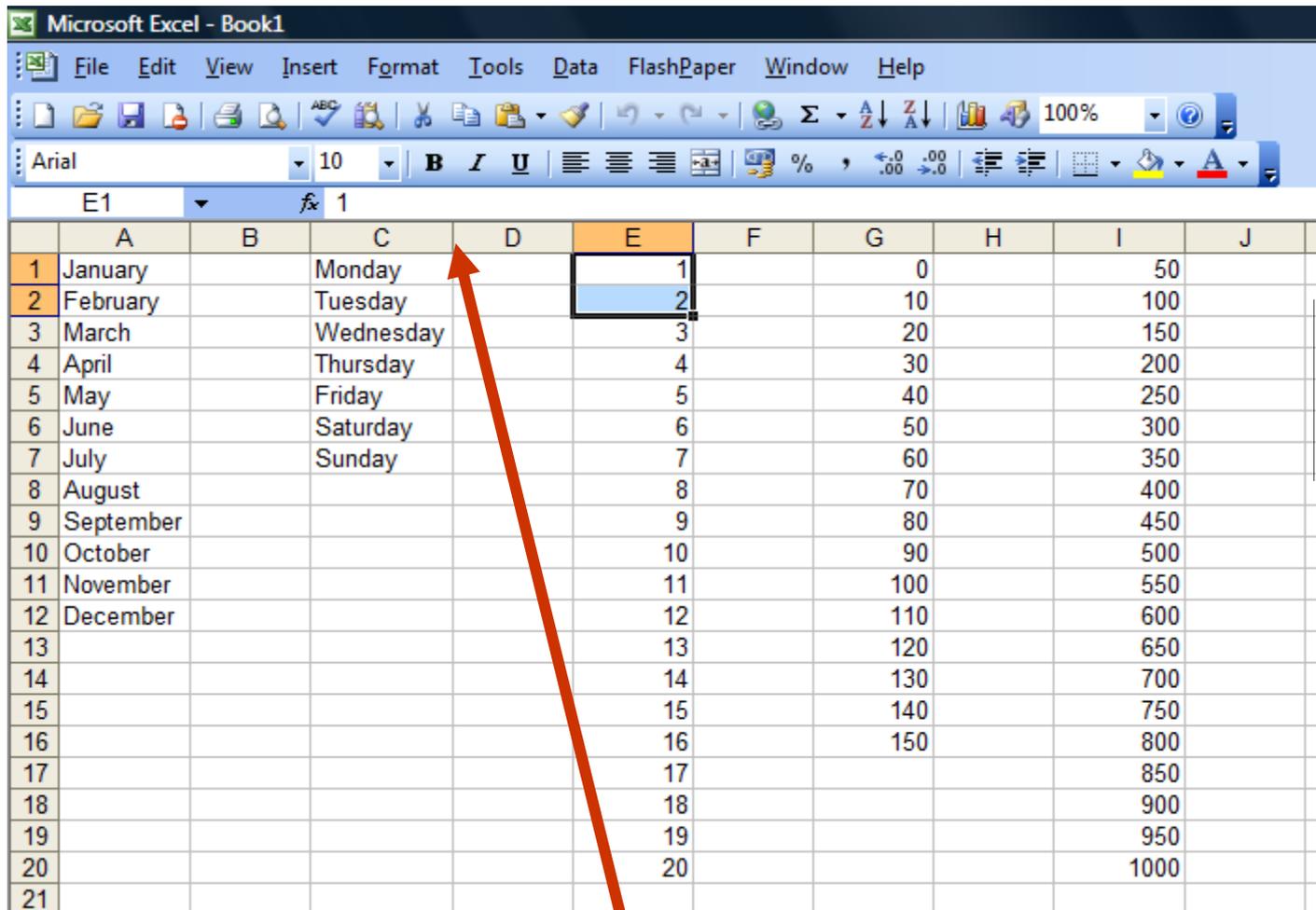
- 1) text **(labels)**
- 2) number data **(constants)**
- 3) formulas **(mathematical equations that do all the work)**

**Address**   **35.62**   **=14/3**   **-996**   **Total**   **=sum(a1:a14)**

**\*ALL formulae MUST begin with an equal sign (=).**

# Entering Sequences

Automatic entry of months / days / number sequences

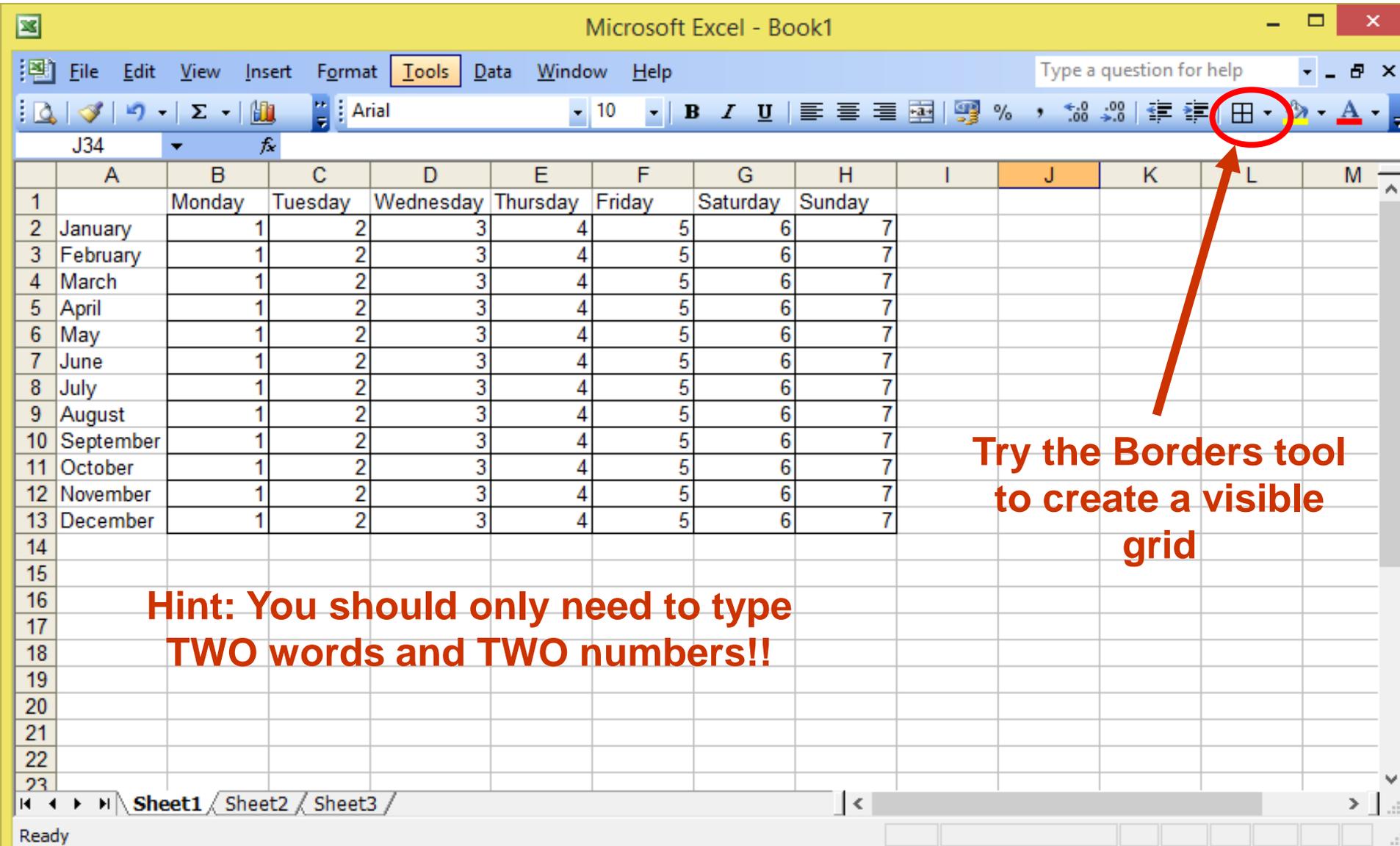


The screenshot shows a Microsoft Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J
1	January		Monday		1		0		50	
2	February		Tuesday		2		10		100	
3	March		Wednesday		3		20		150	
4	April		Thursday		4		30		200	
5	May		Friday		5		40		250	
6	June		Saturday		6		50		300	
7	July		Sunday		7		60		350	
8	August				8		70		400	
9	September				9		80		450	
10	October				10		90		500	
11	November				11		100		550	
12	December				12		110		600	
13					13		120		650	
14					14		130		700	
15					15		140		750	
16					16		150		800	
17					17				850	
18					18				900	
19					19				950	
20					20				1000	
21										

Double-click between columns to automatically widen them.

# See how quickly you can do this: -



The screenshot shows the Microsoft Excel interface with the 'Tools' ribbon selected. The 'Borders' icon, represented by a grid, is circled in red. An orange arrow points from this icon to a text box that says 'Try the Borders tool to create a visible grid'. Below this, another text box provides a hint: 'Hint: You should only need to type TWO words and TWO numbers!!'. The spreadsheet area shows a calendar grid with columns for days of the week and rows for months. The status bar at the bottom indicates 'Ready'.

Microsoft Excel - Book1

File Edit View Insert Format **Tools** Data Window Help

Type a question for help

Arial 10 B I U

J34 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday					
2	January	1	2	3	4	5	6	7					
3	February	1	2	3	4	5	6	7					
4	March	1	2	3	4	5	6	7					
5	April	1	2	3	4	5	6	7					
6	May	1	2	3	4	5	6	7					
7	June	1	2	3	4	5	6	7					
8	July	1	2	3	4	5	6	7					
9	August	1	2	3	4	5	6	7					
10	September	1	2	3	4	5	6	7					
11	October	1	2	3	4	5	6	7					
12	November	1	2	3	4	5	6	7					
13	December	1	2	3	4	5	6	7					
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													

Sheet1 Sheet2 Sheet3

Ready

Try the Borders tool to create a visible grid

Hint: You should only need to type TWO words and TWO numbers!!

# Open the file “Budget 2013 example”: -

Microsoft Excel - BUDGET 2013 Example

Type a question for help

A1 2013

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>												<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>															
17																
18	<b>Income</b>	<b>Jan</b>												<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>															
23	<b>Residual</b>															
24																
25																

Sheet1 / Sheet2 / Sheet3

# Drag the months of the year across: -

Microsoft Excel - BUDGET 2013 Example

Type a question for help

A1 2013

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>															
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£935	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>															
23	<b>Residual</b>															
24																
25																

Sheet1 / Sheet2 / Sheet3

# Insert an autosum $\Sigma$ in cell B16

The screenshot shows the Microsoft Excel interface with the following details:

- Window title: Microsoft Excel - BUDGET 2013 Example
- Formula bar: =SUM(B4:B15)
- Cell B16: Contains the formula =SUM(B4:B15) and is highlighted with a red circle.
- Cell A1: Contains the year 2013.
- Columns B-M: Months from Jan to Dec.
- Column N: Total.
- Rows 3-15: Expenditure items with values in £.
- Row 16: TOTAL row for expenditure.
- Rows 18-21: Income items with values in £.
- Row 22: TOTAL row for income.
- Row 23: Residual row.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	2013															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>	=SUM(B4:B15)														
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>															
23	<b>Residual</b>															
24																
25																

Then press ENTER

# Drag the formula across to December

Microsoft Excel - BUDGET 2013 Example

File Edit View Insert Format Tools Data Window Help

Type a question for help

B16 =SUM(B4:B15)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>	<b>£1,018</b>	<b>£867</b>	<b>£867</b>	<b>£1,014</b>	<b>£1,004</b>	<b>£1,016</b>									
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>															
23	<b>Residual</b>															
24																
25																

Sheet1 Sheet2 Sheet3

Ready

Sum=£11,810

10:30 28/10/2013

# Do the same for the total income

Microsoft Excel - BUDGET 2013 Example

File Edit View Insert Format Tools Data Window Help

Type a question for help

B22 =SUM(B19:B21)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>	<b>£1,018</b>	<b>£867</b>	<b>£867</b>	<b>£1,014</b>	<b>£1,004</b>	<b>£1,016</b>									
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,253</b>	<b>£2,275</b>										
23	<b>Residual</b>															
24																
25																

Sheet1 / Sheet2 / Sheet3

Ready

Sum=£26,990

10:32 28/10/2013

# Insert the formula **=B22-B16** in B23

Microsoft Excel - BUDGET 2013 Example

File Edit View Insert Format Tools Data Window Help

Type a question for help

SUM =B22-B16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	2013															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>	£1,018	£867	£867	£1,014	£1,004	£1,004	£1,004	£1,004	£1,004	£1,004	£1,004	£1,016			
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>	£2,179	£2,179	£2,179	£2,253	£2,275	£2,275	£2,275	£2,275	£2,275	£2,275	£2,275	£2,275			
23	<b>Residual</b>	<b>=B22-B16</b>														
24																
25																

Sheet1 / Sheet2 / Sheet3

# Drag the formula across to December

Microsoft Excel - BUDGET 2013 Example

Type a question for help

B23    =B22-B16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6			
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47			
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151			
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44			
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11			
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4			
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29			
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600			
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12			
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40			
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43			
16	<b>TOTAL</b>	<b>£1,018</b>	<b>£867</b>	<b>£867</b>	<b>£1,014</b>	<b>£1,004</b>	<b>£1,016</b>									
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977			
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625			
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673			
22	<b>TOTAL</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,255</b>	<b>£2,275</b>										
23	<b>Residual</b>	<b>£1,161</b>	<b>£1,312</b>	<b>£1,312</b>	<b>£1,239</b>	<b>£1,271</b>	<b>£1,250</b>									
24																

Sheet1 / Sheet2 / Sheet3

Ready    Sum=£15,180

# Finish by autosumming $\Sigma$ column N

Microsoft Excel - BUDGET 2013 Example

Type a question for help

P27

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>2013</b>															
2																
3	<b>Expenditure</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
4	Life Insurance	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£6	£72		
5	Electricity	£61	£61	£61	£61	£47	£47	£47	£47	£47	£47	£47	£47	£620		
6	Council Tax	£151			£147	£151	£151	£151	£151	£151	£151	£151	£151	£1,506		
7	Car Insurance x 2	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£348		
8	Telephone / Broadband	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£44	£528		
9	TV licence	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£11	£132		
10	Subscriptions	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£4	£48		
11	house/contents insurance	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£29	£348		
12	Food, petrol etc.	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£600	£7,200		
13	Papers	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£12	£144		
14	Heating oil	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£40	£480		
15	Water Bill	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£31	£43	£384		
16	<b>TOTAL</b>	<b>£1,018</b>	<b>£867</b>	<b>£867</b>	<b>£1,014</b>	<b>£1,004</b>	<b>£11,810</b>									
17																
18	<b>Income</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>		
19	Pension	£935	£935	£935	£955	£977	£977	£977	£977	£977	£977	£977	£977	£11,576		
20	Income 1	£617	£617	£617	£625	£625	£625	£625	£625	£625	£625	£625	£625	£7,476		
21	Income 2	£627	£627	£627	£673	£673	£673	£673	£673	£673	£673	£673	£673	£7,938		
22	<b>TOTAL</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,179</b>	<b>£2,253</b>	<b>£2,275</b>	<b>£26,990</b>									
23	<b>Residual</b>	<b>£1,161</b>	<b>£1,312</b>	<b>£1,312</b>	<b>£1,239</b>	<b>£1,271</b>	<b>£1,259</b>	<b>£15,180</b>								
24																
25																

Sheet1 / Sheet2 / Sheet3

Ready

Desktop 10:42 28/10/2013

# Have a go at last week's paper Bill Exercise

	A	B	C	D
1	Paper	No.	Price (£)	Weekly
2	Independent	5	£1.40	=B2*C2
3	N.D. Journal	1	£1.00	
4	Sunday Times	1	£2.00	
5	Radio Times	1	£1.60	
6	Telegraph	5	£1.20	
7	Time	1	£2.89	
8	TOTAL:			
9				

Note the formula!

Result should look like this: -

	A	B	C	D
1	Paper	No.	Price (£)	Weekly
2	Independent	5	£1.40	£7.00
3	N.D. Journal	1	£1.00	£1.00
4	Sunday Times	1	£2.00	£2.00
5	Radio Times	1	£1.60	£1.60
6	Telegraph	5	£1.20	£6.00
7	Time	1	£2.89	£2.89
8	TOTAL:			£20.49
9				

# Now try the practice Exercise (on sheet)

## Practice Exercise: - Constructing a spreadsheet

A self-employed builder uses a spreadsheet to keep a record of his daily jobs. He charges £35.00 an hour and a call-out charge if he has to do a job after 6.00pm

	A	B	C	D	E	F	G	
1	Customer	Charge	Hours	Cost of	Cost of	Call out	Total	
2	Name	per hour	Worked	Labour	Materials	charge	Bill	
3	Law	35	2		4			
4	Derrick	35	3		18			
5	Allen	35	4		40			
6	Crowe	35	1		15	15		
7	George	35	2		12	15		
8								
9				Daily Total :-				
10								

Set out your spreadsheet like the example. Use any methods you know of to simplify data entry.

Enter formulae in columns D and G to calculate the labour costs and total bill for the jobs and also the daily total at the bottom of the sheet

Format all the money cells to show the £ sign and 2 decimal places

Change the font size to Arial 14 pt (you may need to adjust column widths)

Format the table in an effective way using borders and shading.

Save the spreadsheet.

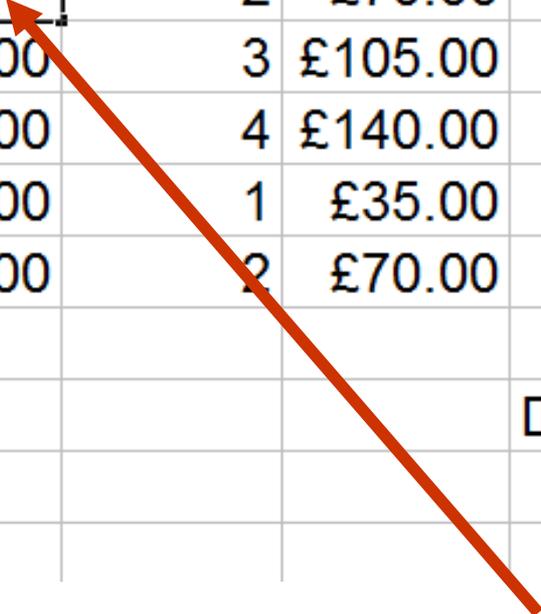
# Naming Cells

	A	B	C	D	E	F	G
1	Customer	Charge	Hours	Cost of	Cost of	Call out	Total
2	Name	per hour	Worked	Labour	Materials	charge	Bill
3	Law	£35.00	2	£70.00	£4.00		£74.00
4	Derrick	£35.00	3	£105.00	£18.00		£123.00
5	Allen	£35.00	4	£140.00	£40.00		£180.00
6	Crowe	£35.00	1	£35.00	£15.00	£15.00	£65.00
7	George	£35.00	2	£70.00	£12.00	£15.00	£97.00
8							
9	rate of pay				Daily Total :-		£539.00
10							
11							

**Click in A10 and type “rate” in the Name Box**  
**Then press ENTER**

# Naming Cells

	A	B	C	D	E	F	G
1	Customer	Charge	Hours	Cost of	Cost of	Call out	Total
2	Name	per hour	Worked	Labour	Materials	charge	Bill
3	Law	=rate	2	£70.00	£4.00		£74.00
4	Derrick	£35.00	3	£105.00	£18.00		£123.00
5	Allen	£35.00	4	£140.00	£40.00		£180.00
6	Crowe	£35.00	1	£35.00	£15.00	£15.00	£65.00
7	George	£35.00	2	£70.00	£12.00	£15.00	£97.00
8							
9	rate of pay				Daily Total :-		£539.00
10							
11							

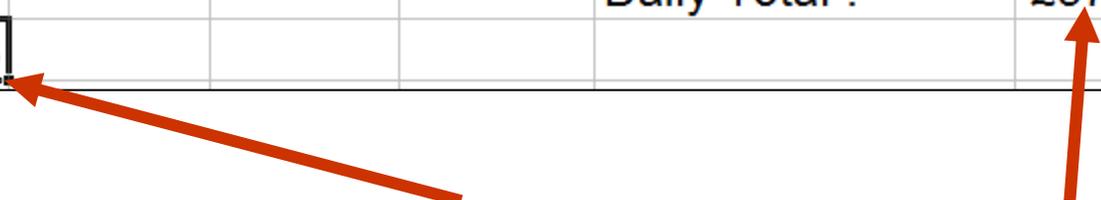


Type the formula “=rate” in cell B3

Then drag it down to cell B7

# Naming Cells

Customer Name	Charge per hour	Hours Worked	Cost of Labour	Cost of Materials	Call out charge	Total Bill
Law	£38.00	2	£76.00	£4.00		£80.00
Derrick	£38.00	3	£114.00	£18.00		£132.00
Allen	£38.00	4	£152.00	£40.00		£192.00
Crowe	£38.00	1	£38.00	£15.00	£15.00	£68.00
George	£38.00	2	£76.00	£12.00	£15.00	£103.00
rate of pay				Daily Total :-		£575.00
38						



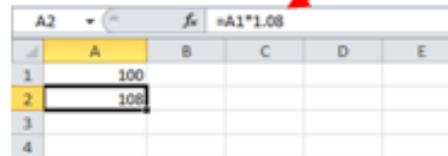
**Whatever you type in A10 gives a new result**

**Q) Find the lowest rate of pay that would still give him £500 per day**

# Try the Compound Interest worksheet

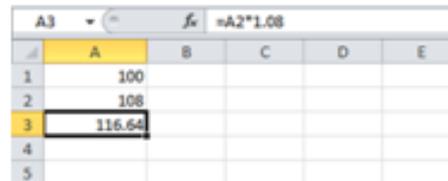
## Using Excel to Calculate Compound Interest

1. Assume you put £100 into a bank. How much will your investment be worth after one year at an annual interest rate of 8%? The answer is £108.



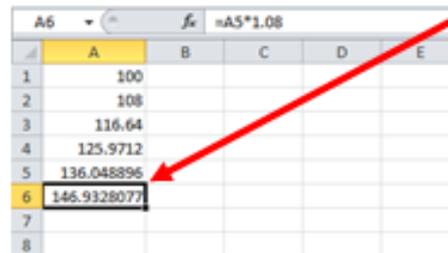
	A	B	C	D	E
1	100				
2	108				
3					
4					

2. Now this interest (£8) will also earn interest (compound interest) next year. How much will your investment be worth after two years at an annual interest rate of 8%? The answer is £116.64.



	A	B	C	D	E
1	100				
2	108				
3	116.64				
4					
5					

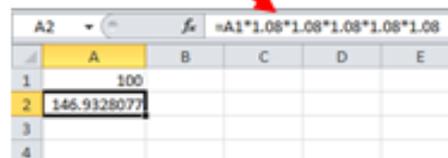
3. How much will your investment be worth after 5 years? Simply drag the formula down to cell A6.



	A	B	C	D	E
1	100				
2	108				
3	116.64				
4	125.9712				
5	136.048896				
6	146.9328077				
7					
8					

The answer is £146.93.

4. All we did was multiplying 100 by 1.08, 5 times. So we can also directly calculate the value of the investment after 5 years.



	A	B	C	D	E
1	100				
2	146.9328077				
3					
4					

# Homework – address\_list.xls

	A	B	C	D	E	F	G
1	Courtesy Title	Last Name	Address 1	Address 2	City	State	Postcode
2	Ms.A.	McLean	73 Guildry Street	Garrigill	Alnwick	NORTHUMBERLAND	CA9 5CO
3	Mrs.A.	Russell	76 Princes Street	Rodbridge Corner	Leicester		CO10 6PE
4	Mr.D.	Hawkins	The Pines, Lammas Street	Great Busby		HERTS	TS9 5JV
5	Mr.D.	Bevan	53 Walden Road	Greenmyre	Colchester	ESSEX	AB53 3EV
6	Ms.E.	Barker	32 Maidstone Road	Wellwood	Sudbury	SUFFOLK	KY12 1QI
7	Mr.E.	Coles	64 Hampton Court Rd	Southrey	Richmond		LN3 7YU
8	Eloise	Heath	97 Pendwyallt Road	Burrow Bridge		LINCS	TA7 9ZK
9	Mrs.E.	Rose	97 St Dunstans Street	Watchfield		CAMBRIDGE	TA9 9CF
10	Imogen	Cole	60 Church Way	Bradwell	Chelmsford	ESSEX	MK13 5NG
11	Isabella	Pritchard	67 Hudson St	Dundreggan		FIFE	IV3 7SI
12	Mr.J.	James	37 Park End St	Brooks	Bath		SY21 1JA
13	Mr and Mrs.P.	Nash	76 Woodstone Road	Welwyn		HERTS	AL6 9CQ
14	Mr.J.	Evans	69 Botley Road	Middletown	Swindon		CA22 2ZD
15	Josh	Knowles	72 Bouverie Road	Weston	Bristol		CW2 2QW
16	Mr.K.	Griffin	83 Hampton Court Rd	Sparkford		HANTS	BA22 4EC
17	Ms.L.	Brennan	52 Merthyr Road	Burmington	Bangor	CAERNARVON	CV36 5AA
18	Ms.	Cooper	93 Asfordby Rd	Aith	Motherwell	LANARKSHIRE	KW16 5ZY
19	Ms.	Nolan	91 Essex Rd	Tarlton		SUFOLK	GL7 1OE
20	Ms.	Lord	Field House, West Lane	Dalfad	Llandudno	CONWY	AB35 0KN
21	Mr.and Mrs. O.	Sharpe	62 Bishopthorpe Road	Pencoed	Milford Haven	PEMBROKE	CF35 7ZD
22	Mr.P.	Gough	46 Maidstone Road	West Aberthaw		POWYS	CF62 4UM
23	Mr.S	Wallace	83 Folkestone Road	Winchet Hill		ESSEX	TN17 4OI
24	Spencer	Chamberlain	78 Boroughbridge Road	Bishop's Tawton		DEVON	EX32 2DE
25	Mr.T	Sharp	64 Constitution St	Llangynog		POWYS	SA33 1TH
26	Zara	Cox	71 Old Chapel Road	Garvock	Winchester	HANTS	PA16 6MT
27							

That's it folks!



You can all go for a lie down in a darkened room now!