

# PC Passport

## SPREADSHEET — Advanced Exercise Booklet (Macintosh)



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# Welcome

Welcome to the Spreadsheet Advanced Exercise Booklet. Here you'll find practical exercises that you can complete to help you learn the topics covered in the Student Workbook. In the workbook, you'll find references that tell you when to do each exercise.

## Summary Tasks

This booklet also contains Summary Tasks that should be completed at the end of each Learning Outcome. An instruction in the workbook will tell you when you should complete these tasks.

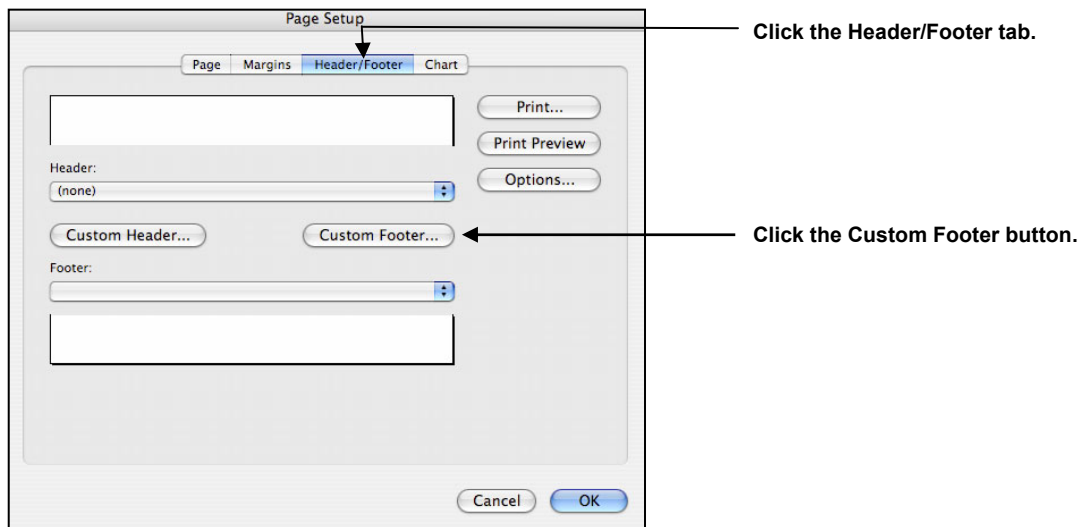
## Printing Spreadsheets

Some of the practical exercises in this Booklet ask you to print your file once you've finished the exercise. To enable you to identify your own printouts, please add your name to the footer on each spreadsheet before printing. Follow these instructions to add a footer:

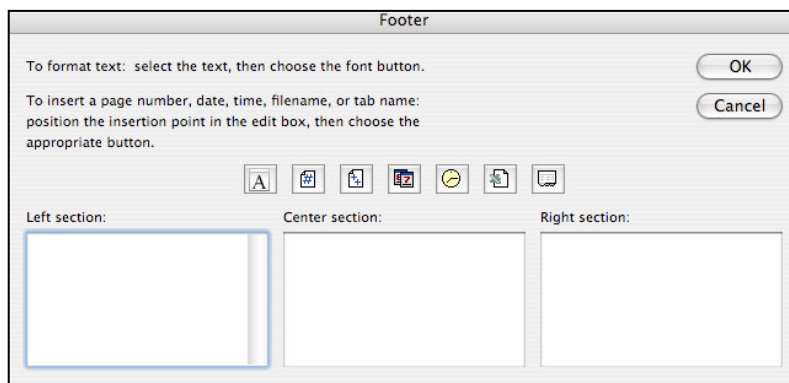
Select the **File, Page Setup** menu option.

Display the **Header/Footer** tab.

Click the **Custom Footer** button.



Type your name in one of the boxes in this window.



Click **OK** then click **OK** again.



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# Spreadsheet Exercise Booklet — Advanced

## Exercise 1.1

### File formats — revision exercise

Your computer has Excel 2003 on it. The default file type for your Excel file is Microsoft Excel Workbook, which has an .xls extension.

1. If you wish to save your workbook in a format that can be read by a user that doesn't have your version of Excel, you should be able to save your file in a format that their software will be able to read. Where do you specify the format of the file you are saving?
2. What type of data would be stored in the following files?

.jpeg	
.wav	
.mpeg	
.tiff	
.sit	
.avi	
.mp3	
.gif	
.zip	
.png	

3. Most of your workbooks are for a colleague who reads them on their computer using Excel 97. You wish to change your default file type to Excel 97. Where can you do this?

4. Which of the following are not file type options for saving workbooks?

.doc, .cvs, .slk, .mdb, .xls, .ppt

5. What do the following extensions stand for? Give a brief summary of the key features of each format. Use the online help if you wish.

.txt	
.cvs	
.slk	



## Exercise 1.2

### File protection

1. In an Excel worksheet, each cell in a worksheet can be either *locked* or *unlocked*. Which feature must be invoked before the effect of these two states becomes apparent?
  
2. *Why* might the owner of a worksheet want to invoke either of the above if other users are working on the worksheet?
  - ◆ Locked status
  
  
  - ◆ Hidden status
  
3. What steps must be taken to activate the locked and/or hidden formatting options?
  
4. Why would it be prudent to add password protection to this option?
  
5. In addition to protecting a worksheet using the above techniques, workbooks can also be protected, so that only those with appropriate permissions can open/edit them. How can you restrict access to a workbook by protecting it?
  
6. What options are available when you protect a workbook in this way?

## Exercise 1.3

### Finding files — review/advanced

If you can't remember exactly where a file is, or what its full name is, you can use the find features to help locate it. You should be able to find files using the Finder or the Find feature in your application.

**Note:** Answers may vary, depending on whether or not additional files have been added to or modified in folder structure used.

### Finder

1. Search for all files and folders in the Jennifer Black folder and subfolders that have **Salary** anywhere in the file name. How many **files** are there?
2. Search for all files and folders in the Jennifer Black folder and subfolders that are less than 10 Kb in size. How many **files** are there?
3. Search for all files and folders in the Jennifer Black folder and subfolders that have been modified since 25 February 04. How many **files** are there?
4. Find all Excel files that include **Exam** in the filename in the Jennifer Black folder and subfolders. Open the file that was modified in February 2004. How many charts are in this workbook?
5. Find all Excel files that include **Stock** in the filename in the Jennifer Black folder and subfolders. Which file has not been modified since 2002? Which cells in this file are formatted using currency formats that are no longer used?
6. Find all Excel files that include **Car** in the filename in the Jennifer Black folder and subfolders. Which file in the results is not about Cars, and which folder is it in?

## Exercise 1.4

### Paste Special

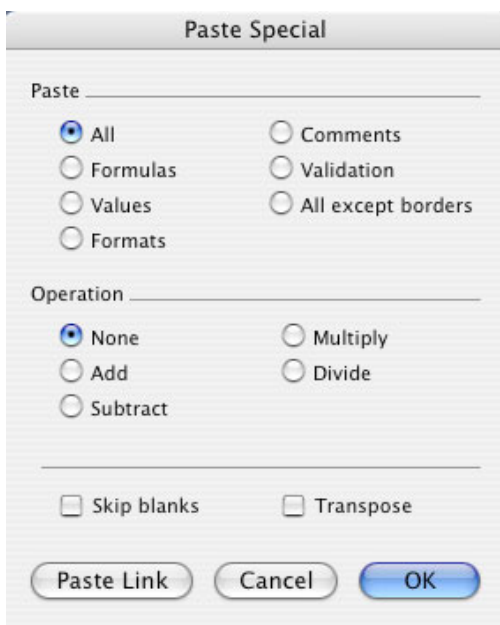
When you copy or cut and paste, you usually want all the data, formula, formatting etc, preserved when you paste. In other words, you want to preserve all the *attributes* when you paste.

However, there may be times when you want to copy or cut some data, but be selective about what you paste at the destination, eg you may not want the formulas, or the borders.

You can select the attributes that you want to paste from the Paste Special dialog box (**Edit, Paste Special**).

To specify which attributes you require:

1. Copy or cut the data required as usual.
2. Select the destination cell/cell range.
3. Open the **Edit** menu and choose **Paste Special**.



4. Select the Paste option required.
5. Click **OK**.
6. Open one of your workbooks and experiment with the Paste options and note the effect that they have.
7. Use on-line help to find information about Paste Special and read the notes on *Copy only values, formulas, comments, or cell formats*.

## Exercise 1.5

### Printing — revise

Recap on your printing skills.

**Note:** To save paper, **Print Preview** your print selections before printing them out!

#### Open the *Clothes* workbook (Jennifer Black folder)

1. Add your name to the Ladies Wear worksheet footer.
2. Display the formulas used in this worksheet.
3. Set the worksheet to print row and column headings, and gridlines.
4. Preview the worksheet in landscape orientation, but do not print.
5. On the **Children's Wear** worksheet, format the data to currency.
6. Add column headings **January** and **February** to the first two columns of figures (cells B5 and B6).
7. Print preview cells **A4:C11** only.
8. Add an appropriate ClipArt image to the Men's Wear and Children's Wear worksheets — move/resize/format as you wish.
9. Print preview *both* the Men's Wear and Children's Wear worksheets, portrait orientation.
10. Close the file *without* saving the changes.

#### Open the *Training Records* workbook

1. Add your name to the footer.
2. Print preview it with the column headings appearing at the top of each page.
3. Close the file *without* saving the changes.

#### Open the *Unicode Projects* workbook (Jennifer Black, PersonalStuff, CollegeWork folder)

1. Add your name to the footer.
2. Print preview the worksheet landscape, with the customer name column repeated as the first column on each page.
3. Close the file *without* saving the changes.

## Exercise 1.6

### Workbook Template

A workbook template is simply a design on which other workbooks are based. If you use the same layout (text/formatting/formulas) in several workbooks you could save yourself a lot of time by saving the standard layout in a custom workbook template, then creating new workbooks from the custom template as required.

#### To create a template:

1. Create a new workbook (or open an existing one).
2. Add any standard text (headings), headers/footers, clipart, formatting and formulas that you want to appear in future workbooks that will be based on the template.
3. Save the workbook as a template (select **Template** in the **Format** field in the **Save As** dialog box).
4. Experiment by creating a simple template — check with your tutor if you aren't sure where you should save it. Once you have created the template, create a new workbook from it.

#### Template location

By default, custom templates will be stored in the My Templates folder (Macintosh HD/Applications/Microsoft Office X/Templates/My Templates). Templates saved here will be displayed in the Project Gallery when you create a workbook.

If you save your template in a different location, eg the desktop or a CD-ROM, navigate to the location using Finder, and double click on the template to create a workbook from it.

To delete a template you create, navigate to it using Finder and delete from there.

## Summary Tasks for Learning Outcome 1

### Task 1

1. Open the workbook **Credit Card Details** stored in your **Household** folder.
2. Move the range **A2:G19** down three rows so that it occupies the range **A5:G22**.
3. Enter the months **January** to **June** as labels in the range **B4:G4**.
4. Copy the range **G5:G22** and paste it in the range **H5:M22**.
5. Extend the range of month names for these columns.
6. Change the **Spending this month** values and the **Payment** values for each of these months, but don't change the other cells as they contain formulas.
7. In column **O** create totals for each of the rows.
8. Put your name and today's date in the worksheet footer.
9. Unlock all cells except those that contain a formula and protect the worksheet.
10. Display the formulae rather than their results in the workbook.
11. Preview the workbook and print it on a single landscape page, with column and row headings, and gridlines displayed.
12. Save the workbook.
13. Delete all data — leave standard text, eg headings/labels and formulas/functions.
14. Save the layout as a template called **CCDetails** and close the file.

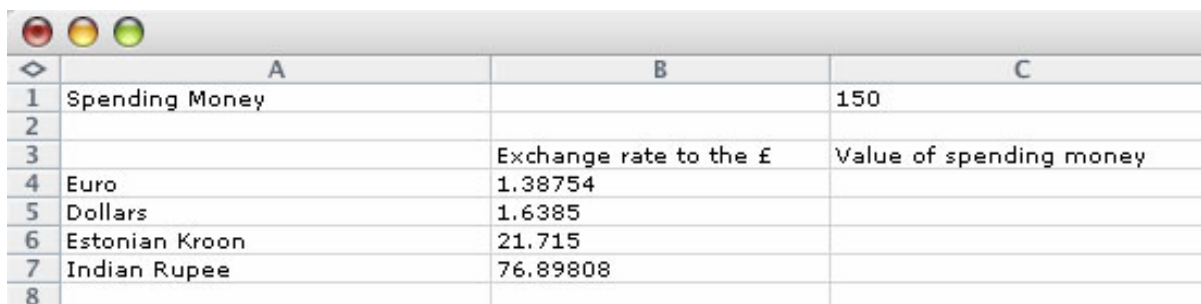
## Exercise 2.1

### Formatting

You have a number of friends who are going to different countries for their holidays. Each is taking £150 spending money in the local currency. You have been asked to calculate how much local currency they will get, given the current rate of exchange (you may check the paper or look up the internet for up to date exchange rates if you wish — try:

[www.x-rates.com/calculator.html](http://www.x-rates.com/calculator.html)).

1. Enter the following data into your spreadsheet.



	A	B	C
1	Spending Money		150
2			
3		Exchange rate to the £	Value of spending money
4	Euro	1.38754	
5	Dollars	1.6385	
6	Estonian Kroon	21.715	
7	Indian Rupee	76.89808	
8			

2. Use formulas as appropriate to calculate the value of spending money in the local currencies.
3. Row 1 — set text to size 16, bold.
4. Row 3 — set text alignment to vertical, format font to size 14, bold and red.
5. Column C — format figures to appropriate currency.
6. Rows 4–7 — set text to size 14.
7. Use custom borders and shading to further enhance as you wish.
8. Insert an appropriate clipart image to the right of the data — format as you wish.
9. Apply any other formatting as desired.
10. Save your workbook with a suitable name.

<b>Spending money</b>	<b>£150.00</b>		
		<b>Exchange rate to the £</b>	<b>Value of spending money</b>
Euros	1.38754		€ 208.13
Dollars	1.6385		\$245.78
Estonian Kroon	21.715		3,257.25 kr
Indian Rupee	76.89808		INR 11,534.71

## Exercise 2.2

### Absolute/Relative Cell referencing

Answer the following questions:

		True or False?
By default, all cell addresses are	Relative	
The keyboard shortcut used to change F4 to \$F\$4 in a formula is	Shift [F4]	
\$B7 in a formula in C7 copied to cells C8:C10 will become	B8:B10	
A\$9 in a formula in F9, copied to cells G9:I9 becomes	B\$9:D\$9	

## Exercise 2.3

### Review of Absolute/Relative cell addressing and statistical functions

Enter the following data into a new worksheet, using the following guidelines:

Cell range C6:C9 — formulas.

Cell range D6:D9 — formulas.

Cell range C11:C15 — functions.

Format all figures appropriately (currency, percentage, integer etc).

	A	B	C	D
1	<b>Furniture Sale</b>			
2				
3	<b>Everything reduced by</b>		<b>40%</b>	<b>RRP</b>
4				
5	<b>Item</b>	<b>RRP</b>	<b>Sale Price</b>	<b>Saving</b>
6	Desk	£ 300.00	£ 120.00	<b>£ 180.00</b>
7	Chair	£ 195.00	£ 78.00	<b>£ 117.00</b>
8	Table	£ 360.00	£ 144.00	<b>£ 216.00</b>
9	Bed	£ 400.00	£ 160.00	<b>£ 240.00</b>
10				
11	<b>Cheapest Sale Price</b>		£ 78.00	
12	<b>Most Expensive Sale Price</b>		£ 160.00	
13	<b>Average Sale Price</b>		£ 125.50	
14				
15	<b>Number of items in sale</b>		4	



1. Enhance the layout by formatting as required.
2. Use an appropriate function to display today's date in D2.
3. Rename the worksheet **Furniture Sale**.
4. Put your name and today's date in the worksheet footer.
5. Save your worksheet.
6. Take a print out showing formulas, with column and row headings and gridlines displayed (adjust column widths to display complete formula if necessary).
7. Take a print out showing data.

## Exercise 2.4

### Cell formatting

On a new worksheet, create a worksheet to calculate the December wages for your temporary staff data, following the guidelines given:

Data entry: Row 1:4; A5:B14; all other cells contain formulae/functions.

Format the worksheet as you wish, but ensure that:

- ◆ Row 3 — has the date and time formatted as shown.
- ◆ Column headings in row 4 are formatted to text wrap within cells.
- ◆ Monetary values formatted to currency with two decimal places.
- ◆ Borders used effectively to add emphasis.
- ◆ Font formatting applied and shading used.
- ◆ ClipArt and/or drawing tools used to add seasonal theme.

It should look similar to the one below:

	A	B	C	D	E	F	G
1	<b>Christmas Pay Details</b>						
2	<b>Pay date</b>		<b>Finishing time</b>				
3	22-Dec-04		13:00:00				
4	<b>Employee name</b>	<b>Hours worked</b>	<b>Basic wage</b>	<b>Total including Bonus</b>			
5	Peter Wilson	5	£ 22.50	£ 47.50			
6	Alison Brandt	8	£ 36.00	£ 61.00			
7	Gill Peterson	3	£ 13.50	£ 38.50			
8	Andrew Thomas	2	£ 9.00	£ 34.00			
9							
10	<b>Total wages bill for month</b>		<b>£ 81.00</b>	<b>£ 181.00</b>			
11							
12							
13	<b>Hourly Rate</b>	<b>£ 4.50</b>					
14	<b>Christmas Bonus</b>	<b>£ 25.00</b>					
15							



## Exercise 2.5a

### Multi Level Sort

1. Open the file **Training Records**.
2. Format the date column to display dd/mm/yy.
3. Adjust the column widths as necessary to display all data.
4. Freeze the column headings so that rows 1:3 remain at the top of the screen when you scroll data.
5. Sort the data into ascending order by **Category**, then by **Course Attended**.
6. Format the duration column so that courses that last two days or more have a yellow fill colour and bold font, and those lasting less than two days have a green fill colour and bold font.
7. Insert a manual page break above the **Unicode Software Solutions** company data.
8. Enter your name into the footer, right hand side, font size 8.
9. Print preview the document at 90% of normal size (so that it fits onto two pages).
10. Close the workbook without saving it.

## Exercise 2.5b

1. Open the file **Training Records**.
2. Format the date column to display dd/mm/yyyy.
3. Adjust the column widths as necessary to display all data.
4. Freeze the column headings so that rows 1:3 remain at the top of the screen when you scroll down through the data.
5. Sort the data into ascending order by **Company**, then by **Attendee Name**.
6. Insert a manual page break above the **Unicode Software Solutions** company data.
7. Enter your name into the footer, right hand side, font size 8.
8. Format the page so that row 3 will print at the top of each page when printed.
9. Print preview the document at 90% of normal size (so that it fits onto two pages).
10. Close the workbook without saving it.

## Exercise 2.6a

### Database function exercises

#### DCOUNT

1. Open the Membership Database workbook (Workstuff, Databases folder).
2. Switch off the AutoFilter (if necessary).
3. Insert four empty rows above the column headings — this area will be used to specify the criteria range.
4. Copy the column headings into row 3.
5. Set up criteria in this range to extract only those members that are 35 or over.
6. In cell A24, enter the text — **Members within age range**.
7. In cell A25, use the **DCOUNT** function to count the number of members over 35.
8. Change the criteria range to count members who are 50 or over.
9. Print preview the worksheet in landscape orientation.
10. Close the workbook without saving it.

## Exercise 2.6b

#### DCOUNT

1. Open the Membership Database workbook.
2. Switch off the AutoFilter (if necessary).
3. Insert four empty rows above the column headings — this area will be used to specify the criteria range.
4. Copy the column headings into row 3.
5. Set up criteria in this range to extract only those members who paid before 1 May 04.
6. In cell A24, enter the text — **Members who paid early**.
7. In cell A25, use the **DCOUNT** function to count the number of members who meet the criteria set.
8. Change the criteria range to count members who are paid after 1 May 04.
9. Print preview the worksheet in landscape orientation.
10. Close the workbook without saving it.

## Exercise 2.6c

### DSUM

1. How much has been paid in membership fees by those members who live in Oldcastle?
2. How much has been paid by members living in Alverston?
3. How much has been paid by members living in Blackwell?

## Exercise 2.6d

### DAVERAGE

1. What is the average age (to the nearest full year) of members living in Oldcastle?
2. What is the average age (to the nearest full year) of members living in Alverston?
3. What is the average age (to the nearest full year) of members living in Blackwell?

## Exercise 2.6e

### DMIN/DMAX

1. What is the maximum age (to the nearest full year) of members living in Oldcastle?
2. What is the minimum age (to the nearest full year) of members living in Alverston?
3. What is the minimum age (to the nearest full year) of members living in Blackwell?

## Summary Tasks for Learning Outcome 2

### Task 1

1. Open the workbook **Training Records** stored in your main folder.
2. Sort this list of records in ascending order of **Department**.
3. Select all the records in the **Admin** department and print only this selection. Remember to add your name to the footer before printing.
4. Sort this list in descending order of date.
5. Select the column headings and all the records with a training date of 19/2/03 or 18/12/03.
6. Adjust the margins and column widths in print preview so that all the data fits on one sheet of paper then print two copies of these records only.
7. Sort the data in ascending order of trainer.
8. Print preview page 1 only of all records.
9. Sort the data into ascending order on Department, Attendee Name and then Course attended.
10. In cell A67 enter the label '**Data updated on**', then in B67 insert today's date using an appropriate function.
11. Print your results on two pages, with row 3 repeated at the top of each page.
12. Save and close the workbook.

### Task 2

1. Open the workbook **Exam Results** stored in your **PersonalStuff** folder.
2. Use appropriate functions to complete this workbook.
3. Add a new label '**No. who passed**' in A18. Use an appropriate function to calculate the number of students who got 50% or more in each exam.
4. Put your name in the worksheet footer.
5. Print one copy of the workbook.
6. Save and close the file.

## Exercise 3.1

### Lists and Dataforms

1. Enter the following two records into a new worksheet — name the worksheet **Student Results**.
2. Use functions to complete column F and G (in column G, if a student's average mark is  $\geq 50$  they pass the course, otherwise they fail).

	A	B	C	D	E	F	G
1	<b>STUDENT RESULTS</b>						
2	<b>Firstname</b>	<b>Surname</b>	<b>Computing</b>	<b>Maths</b>	<b>English</b>	<b>Average</b>	<b>Course Result</b>
3	Jack	Thomson	36	52	55	48	Fail
4	Gill	Ferguson	45	51	52	49	Fail

3. Use the **data form** for the list to complete the other details for students in rows 5–11:

5	Paul	Nixon	55	62	92	70	Pass
6	Peter	Borthwick	55	20	55	43	Fail
7	Jack	Anderson	77	82	80	80	Pass
8	Adam	Ferguson	79	68	38	62	Pass
9	Alison	Evans	82	75	76	78	Pass
10	Val	Peters	91	86	64	80	Pass
11	Paul	Morris	45	39	52	45	Fail

4. Sort the data into ascending order on **Surname** then **Firstname**.
5. Starting in row 13 (*Lowest Mark in class* in cell A13), use appropriate functions to calculate the highest, lowest and average mark for each subject (to 0 decimal places).

13	Lowest mark in class	36	20	38
14	Highest mark in class	91	86	92
15	Average mark in class	63	59	63

6. Put your name and today's date into the worksheet footer.
7. Format the worksheet effectively.
8. Save the worksheet and print it out — in data view.
9. Then print the worksheet out in formula view, with the row and column headings and gridlines displayed. The printout should fit onto one page.
10. Close the workbook.

## Exercise 3.2

### Filtering

1. Use the **Students Result** worksheet to practice filtering data lists. Use **AutoFilter** for this.
  - ◆ Display all records where the student surname is **Ferguson**.
  - ◆ Display all records where the Maths mark was  $\geq 55$ .
  - ◆ Display all records where the student result was **Fail**.
  - ◆ Display all records where the Computing result was between **50 and 80 (inclusive)**.

## Exercise 3.3

### Advanced Filter

1. Use the Advanced Filter option to display those students who:
  - ◆ Passed Computing but failed the course.
  - ◆ Achieved 65 or more in each subject.
  - ◆ Scored between 50 and 70 (inclusive) in Computing.
  - ◆ Averaged either below 50 or 80 and above.

## Exercise 3.4

### Scenarios

#### What if

You are considering a number of loan options for a car, and wish to calculate the monthly repayments that would be due for the various options. You can use scenarios to do this — to see **what** will happen **if** different loans/interest rates/payback periods are applied. By changing the input values to a function, you can find out what the result will be — the monthly payment in this example.

The options are:

	<b>Amount of Loan</b>	<b>Interest Rate</b>	<b>Payback Period</b>
<b>Option 1</b>	£22,000	7%	5 years
<b>Option 2</b>	£25,000	8%	8 years
<b>Option 3</b>	£30,000	10%	12 years

1. On a new worksheet, input the option 1 data and use the =PMT function to calculate the monthly repayment on this option (£435.63).

	A	B	C	D	E
1	<b>Loan Repayment Calculations</b>				
2					
3	<b>Loan</b>	£ 22,000.00			
4	<b>Interest Rate</b>	7%	per annum		
5	<b>Period</b>	5	years		
6					
7	<b>Payment</b>	-£ 435.63			

2. Open the **Tools** menu, choose **Scenarios**, and set up the three scenarios — one for each option in the table above. They will be listed in the **Scenario Manager** dialog box.
3. Show each of the scenarios in turn — you are looking for the one with the lowest monthly repayments, as you are tight for cash on a day-to-day basis.
4. Which option will cost least each month?

You will notice that only one scenario can be displayed at a time — so you have to keep switching between them to compare one with the other.

If you wish to display the results of each scenario side-by-side so you can compare them more easily, you can use a **Scenario Summary**.

5. Create a scenario summary for your options (choose **Summary** from the **Scenario Manager** dialog box).

	A	B	C	D	E	F	G
1							
2		<b>Scenario Summary</b>					
3			<i>Current Values:</i>	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	
5		<b>Changing Cells:</b>					
6		\$B\$3	£ 22,000.00	£ 22,000.00	£ 25,000.00	£ 30,000.00	
7		\$B\$4	7%	7%	8%	10%	
8		\$B\$5	5	5	8	12	
9		<b>Result Cells:</b>					
10		\$B\$7	-£ 435.63	-£ 435.63	-£ 353.42	-£ 358.52	
11		Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.					
12							
13							
14							



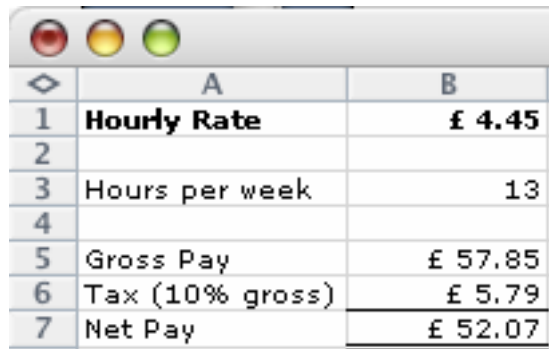
## Exercise 3.5

### Goal Seek

Goal seeking works in the opposite direction to scenarios. By specifying the output value required from a function, Excel will work back to tell you what the input values will need to be.

Let's say that you are working part-time and earn £4.25 per hour. The number of hours that you work varies each week, but you usually do 13 hours per week.

You have set up a mini spreadsheet to help you record your earnings. Cells B5:B7 contain formulae.



	A	B
1	<b>Hourly Rate</b>	<b>£ 4.45</b>
2		
3	Hours per week	13
4		
5	Gross Pay	£ 57.85
6	Tax (10% gross)	£ 5.79
7	Net Pay	£ 52.07

You are hoping to take a holiday later in the year with some friends, and will need to save £25 per week towards this. You will need to earn more money if you are to do this — you have worked out that you need to earn at least £65 per week (net).

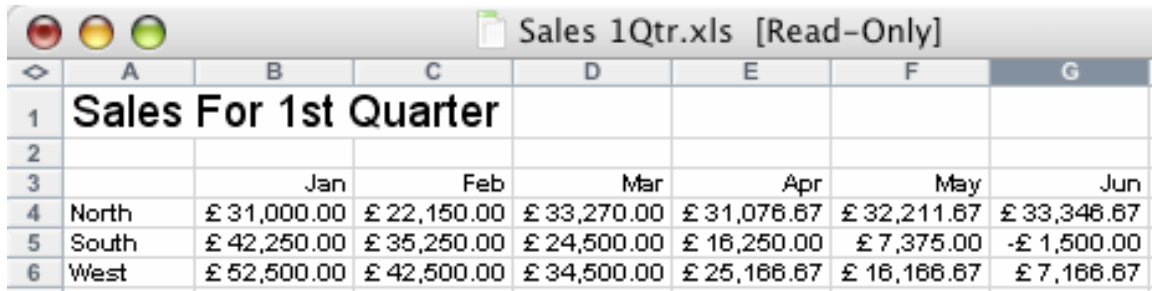
Use Goal Seek to work out how many hours you would need to achieve this or, if working the same number of hours, what your hourly rate would need to be.

## Exercise 3.6a

### Trendlines

#### Projecting data with trendlines

1. Open the workbook **SalesQ1** from the Workstuff, Sales Folder.
2. Extend the column headings along to June.
3. Format the data as currency.
4. Project the sales figures for the next three months using a linear trend.



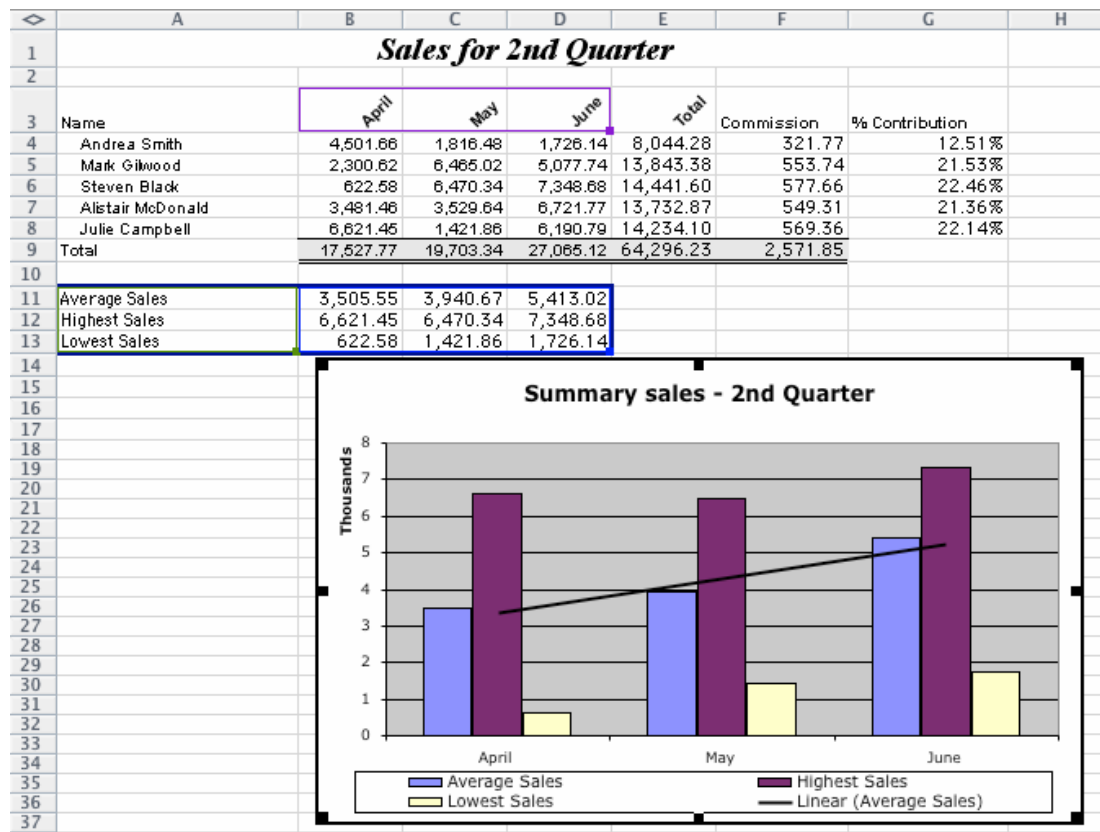
	A	B	C	D	E	F	G
1	<b>Sales For 1st Quarter</b>						
2							
3		Jan	Feb	Mar	Apr	May	Jun
4	North	£ 31,000.00	£ 22,150.00	£ 33,270.00	£ 31,076.67	£ 32,211.67	£ 33,346.67
5	South	£ 42,250.00	£ 35,250.00	£ 24,500.00	£ 16,250.00	£ 7,375.00	-£ 1,500.00
6	West	£ 52,500.00	£ 42,500.00	£ 34,500.00	£ 25,166.67	£ 16,166.67	£ 7,166.67

## Exercise 3.6b

### Trendlines in charts

1. Open the workbook **SalesQ2** from the Workstuff, Sales Folder.
2. Create an embedded 2-D column chart to display the Summary data (Average, Highest and Lowest) for each month.
3. Place the legend at the bottom of the chart.
4. Adjust the font sizes etc, to get an attractive chart layout.
5. Display the value axis in thousands, to 0 decimal places.
6. Add a linear trendline for the Average Sales.

*See example on next page.*



## Exercise 3.7

### Macros

Macros can be very useful for automating routines that you perform repeatedly. Try creating the following macros for practice.

1. Create a macro (in your workbook) that will perform the following tasks in preparation for printing:
  - ◆ Switch on row and column headings.
  - ◆ Display gridlines on worksheet when printed.
  - ◆ Add your name to the worksheet footer.
  - ◆ Switch to formula view.

Assign the macro to a tool on a toolbar (you might want to create a toolbar of your own for this).

2. Create a second macro that will reverse the one above, eg:
  - ◆ Switch off row and column headings.
  - ◆ Hide gridlines on worksheet when printed.
  - ◆ Remove your name to the worksheet footer.
  - ◆ Switch to data view.

Assign the macro to a tool on a toolbar (you might want to create a toolbar of your own for this).

## Summary Tasks for Learning Outcome 3

### Task 1

1. Open the **Student results** workbook you created in exercise 3.1 and add a graphic in the top left corner to reflect a student — pick one from any clip art source.
2. Save your work and close the workbook.

### Task 2

1. Open the macro you created in exercise 3.7 and add the current date.
2. Assign the macro to a tool on a toolbar (your own toolbar you might have created in exercise 3.7).