1) 1: Define the term **qualitative data**

2: Give three examples of qualitative data

3: Define the term **quantitative data**

4: Give three examples of quantitative data

2) 1: What does the term **discrete data** mean?

2: Write down 3 examples of discrete data

3: What does the term **continuous data** mean?

4: Write down 3 examples of continuous data

3) Patrick invested money into a special savers bank account.
Each year money in the account earns 4% interest.

After one year, the total amount of money in the account was £291.20

How much did Patrick invest?

4) Alice buys a book for £19.80
A year later she sells the book for £12.87

Calculate the percentage decrease in the value of the book.

5) There are 52800 fans at a football match between Rovers and City.
37% of the fans support Rovers.

How many fans at the match support City?

6) The table shows information about the inhabitants of a village.

Age	Population Size
0 - 20	693
21 - 40	1203
41 - 60	802
Over 60	405

Bernard is going to carry out a survey about the local library.
He wants to find out how often people have been to the library in the last year.

Bernard decides to take a stratified sample.

(a) Explain why it is appropriate to take a stratified sample.

Bernard takes a stratified sample of 100.

(b) Calculate the number of each age group that Bernard should choose.

7) Parker wants to take a random sample of people who live in his street.

(a) Explain what is meant by a random sample.

(b) Describe a method Parker could use to take his random sample.

8) Here are the weights, in kilograms, of 10 dogs.

9.2 4.3 68.2 12.3 6.5 10.6 14.2 16.0 9.1 8.5

(a) Work out the range.

(b) Work out the median.

The median is more appropriate than the mean to summarise the data.

(c) Explain why.

9) The figures below show the amount, in £ millions, of UK aid given to Ethiopia for each of the years 2009 to 2015

219 263 344 265 329 321 338

The table gives a summary of the amount, in £ millions, of UK aid given to Pakistan for the years 2009 to 2015

Mean	Standard deviation	Greatest amount
243.7	79.5	374

(Source: *dfid.gov.uk*)

Compare the amount of UK aid given to Ethiopia and the amount of UK aid given to Pakistan for the years 2009 to 2015

10) A farmer recorded the birth weights, in kg, of a sample of 50 piglets born on his farm.

The grouped frequency table gives information about his results.

Weight (w kg)	Frequency (f)
$0.5 \leqslant w < 1.5$	4
$1.5 \leqslant w < 2.0$	12
$2.0 \leqslant w < 2.5$	17
$2.5 \leqslant w < 3.0$	13
$3.0 \leqslant w < 4.0$	3
$4.0 \leqslant w < 6.0$	1

Calculate the mean and standard deviation of the weights

11) Jack invests £1,750 in a savings account which earns compound interest paid at a rate of 0.85% every 3 months. He uses a spreadsheet to keep track of the accounts earnings:

	A	B	C	D
1		**Starting amount (£)**	**Interest (£)**	**Final Amount (£)**
2	First 3 months	1750.00	14.88	1764.88
3	Second 3 months	1764.88		
4	Third 3 Months			
5	Fourth 3 Months			

a) Write down the spreadsheet formula that will calculate the vale in cell C2
b) Complete the spreadsheet
c) What is the AER on this account?

12) If an account earns an AER of 2.1%, and the amount is calculated monthly, what is the nominal interest rate on the account?

13) If Henry borrows £550, at 27.4% APR and pays it back in two equal, annual instalments, how much is each instalment?

14) Using trial and improvement, what is the APR on a loan of £250, paid back in 3 monthly instalments of £100, £150 and £150?