1   Here is a list of numbers.

$$8 \quad -9 \quad 13 \quad 4 \quad -16 \quad -7 \quad -2$$

(a) From the list, write down the highest number.

.... 13

(1)

(b) From the list, write down the highest number.

.... 13

(1)

(c) From the list, write down the median number.

-16 -9 -7 (-2) 4 8 13

.... -2

(1)

(d) Calculate the range of the numbers.

$$13 - (-16) = 13 + 16$$
$$= 29$$

.... 29

(1)

(Total for Question 1 is 4 marks)

2   Here is another list of numbers.

$$18 \quad -91 \quad 113 \quad 34 \quad -16 \quad -47 \quad -12$$

(a) From the list, write down the highest number.

.... 113 ....

(1)

(b) From the list, write down the highest number.

.... 113 ....

(1)

(c) From the list, write down the median number.

$-91\ -47\ -16\ \boxed{-12}\ 18\ 34\ 113$

.... -12 ....

(1)

(d) Calculate the range of the numbers.

$113 - (-91) = 113 + 91$
$\qquad\qquad\quad = 204$

.... 204 ....

(1)

(Total for Question 2 is 4 marks)

3   Here is another list of numbers.

$$-98 \quad -14 \quad 9 \quad -38 \quad 91 \quad 24$$

(a) From the list, write down the highest number.

.... 91 ....

(1)

(b) From the list, write down the highest number.

.... 91 ....

(1)

(c) From the list, write down the median number.

$-98 \quad -38 \boxed{-14 \quad 9} \quad 24 \quad 91$

.... $-2\frac{1}{2}$ ....

$\dfrac{9 + -14}{2} = \dfrac{-5}{2} = -2\frac{1}{2}$ (1)

(d) Calculate the range of the numbers.

$91 - (-98) = 91 + 98 = 189$

.... 189 ....

(1)

(Total for Question 3 is 4 marks)

4   a   Write down the cube of 8.

$8 \times 8 \times 8$

512

(1)

b   Write down the cube of 2.

8

(1)

c   Write down the cube of 5.

125

(1)

d   Write down the cube of 4.

64

(1)

e   Write down the cube of 1.

1

(1)

f   Write down the cube of 3.

27

(1)

g   Write down the cube of 9.

729

(1)

(Total for Question 4 is 7 marks)

4   a   Write down all the even factors of 80

$1, 2, 4, \overset{5}{8}, 16, 20, 40 \ 80$

2,4,8,16,20,40,80

(1)

b   Write down the odd factors of 90.

$1 \times 90 \quad 5 \times 18$
$2 \times 45 \quad 6 \times 15$
$3 \times 30 \quad 9 \times 10$

1,3,5,9,15,45

(1)

c   Write down the even factors of 28

1×28
2×14
4×7

2,4,14,28

(1)

d   Write down the odd factors of 60.

1,3,5,15

$1 \times 60 \quad 5 \times 12$
$2 \times 30 \quad 6 \times 10$
3×20
4×15

(1)

e   Write down the odd numbers between 140 and 150.

_141, 143, 145, 147, 149_

(1)

f   Write down a factor of 34 which is odd.

_1, 17_

(1)

(Total for Question 5 is 6 marks)

5   Write down the value of the 7 in the following number.

927 381

_7000_

(Total for Question 5 is 1 mark)

6   Write down the value of the 3 in the following number.

927.381

$\frac{3}{10}$

(Total for Question 6 is 1 mark)

7   Write down the value of the 4 in the following number.

2839.104

$\frac{4}{1000}$

(Total for Question 7 is 1 mark)

8   Write down the value of the 1 in the following number.

928,472.4921

$\frac{1}{10000}$

(Total for Question 8 is 1 mark)

9   Write down the value of the 2 in the following number.

0.16425

$\frac{2}{10000}$

(Total for Question 9 is 1 mark)

10   Write down the value of the 7 in the following number.

43.291872

$\frac{7}{100000}$

(Total for Question 10 is 1 marks)

11   Here are the weights of 10 girls given in kilograms.

73.1   63.9   59.3   84.2   90.4   55.9   71.4   72.4   83.2   74.3

(a)   Find the median weight for this set of girls?

55.9, 59.3, 63.9, 71.4, 72.4, 73.1, 74.3, 83.2, 84.2, 90.4

$\begin{array}{r} 72.4 \\ 73.1 + \\ \hline 145.5 \end{array}$

$\begin{array}{r} 72.75 \\ 2\overline{)145.5} \end{array}$

72.75

(2)

(b)   A girl is chosen at random. Write down the probability that she weighs less than 80kg.

$\frac{7}{10}$

(1)

(Total for Question 11 is 3 marks)

12   The hourly wages of several friends are shown below.

£7.30   £6.90   £6.90   £7.30   £7.30   £14.25   £4.85

(a) What is the median wage of the friends?

£4.85, £6.90, £6.90, £7.30, £7.30, £7.30, £14.25

£7.30

(2)

(b) Each of the friends works for 25 hours one week. What is the range of their pay in that week?

$\begin{array}{r} 14.25 \\ 25 \times \\ \hline 71.25 \\ 285.00 \\ \hline 356.25 \end{array}$

$\begin{array}{r} 4.85 \\ 25 \times \\ \hline 24.25 \\ 97.00 \\ \hline 121.25 \end{array}$

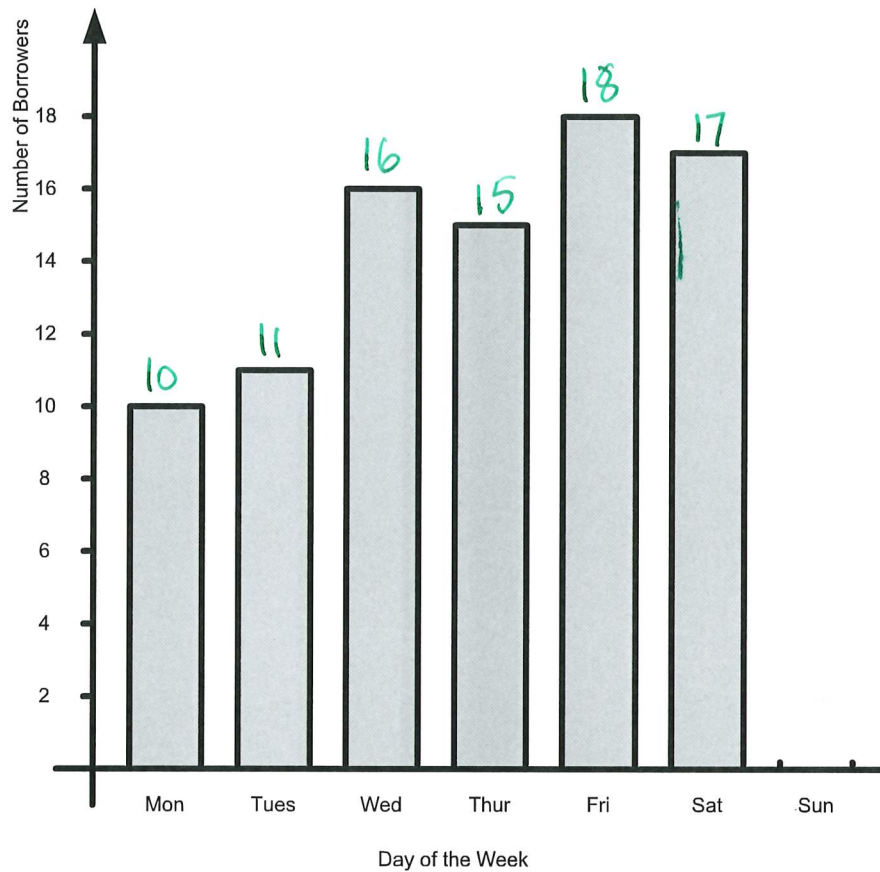$\begin{array}{r} 356.25 \\ 121.25 - \\ \hline 235.00 \end{array}$

£235.00

(3)

(Total for Question 12 is 5 marks)

13   When the library is open, it sends a mobile library to Clacksby.

Below, the bar chart shows the number of daily borrowers from one particular week in August 2025.

(a) Work out the total number of borrowers that attended the mobile library.

$10 + 11 + 16 + 15 + 18 + 17 = 87$

.... 87 ....

(2)

(b) Why do you think that no borrowers turned up on Sunday?

.... Library was closed ....

(1)

(Total for Question 13 is 3 marks)

14   A building merchants looked at its sales for each of the different departments last year.
     The Sales Volume is the number of sales made.
     Complete the table below. Write down the calculations you did underneath the table
     giving the Total for the Sales Volume column, one item from 'Percentage of Sales' and
     one item from 'Total Takings'.

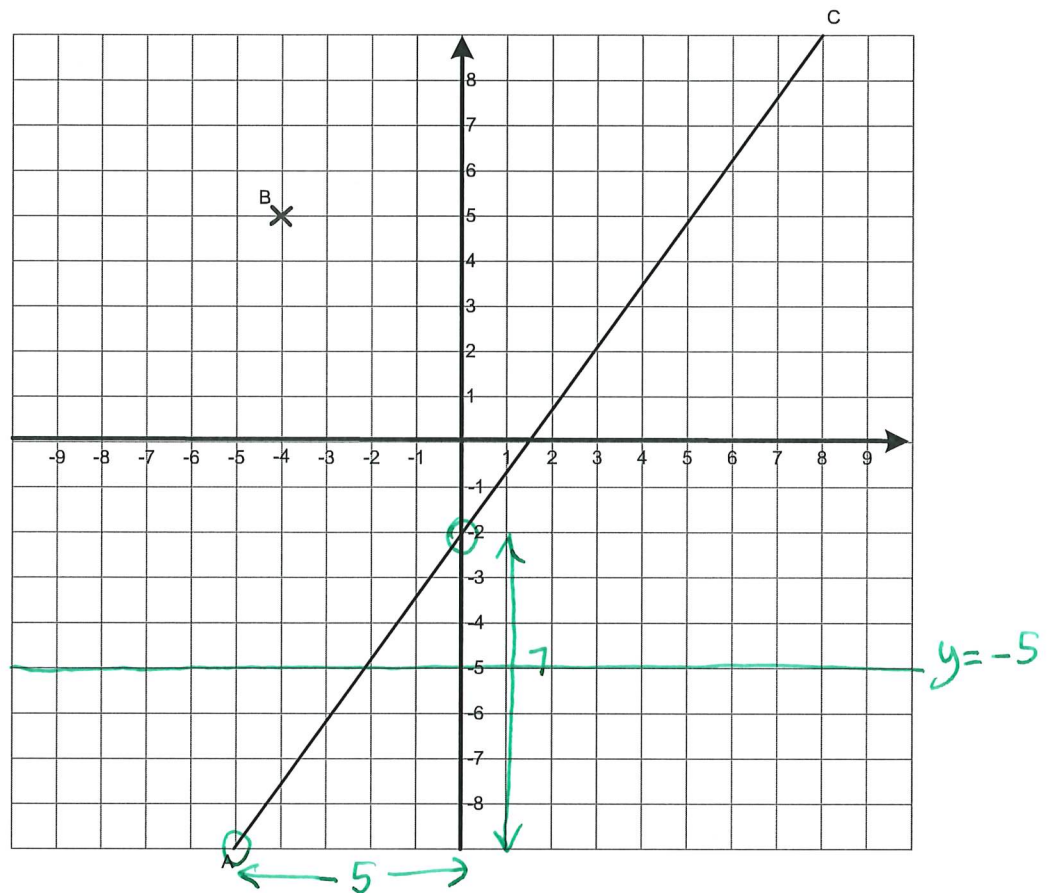| Department	Sales Volume	Percentage of Sales	Total Takings
Gardening	250	50 %	1,245,000
Kitchens	45	9 %	224,100
Bathrooms	28	5·6 %	139,440
Tools	90	18 %	448,200
Bricks and Mortar	87	17·4 %	433,260
Total	500	100%	£ 2,490,000

$$250 + 45 + 28 + 90 + 87 = 500$$

$$\frac{250}{500} \times 100 = 50\%$$

$$\frac{9}{100} \times 2490000 = 224,100$$

(Total for Question 14 is 5 marks)

15   Below is a graph.

(a) Write the co-ordinates of the cross at point B.

$(-4, 5)$

(1)

(b) Write the equation of the straight line AC.

$m = \dfrac{Rise}{Run} = \dfrac{7}{5}$ $c = -2$

$y = \dfrac{7x}{5} - 2$

(3)

(c)   On the grid, draw the line y=-5

(1)

(Total for Question 15 is 5 marks)

16 (a) Write $\frac{15}{2}$ as a mixed number.

$2\overline{)15}$ 7^{2}_{3} r1

$7\frac{1}{2}$

(1)

(b) Write $5\frac{2}{3}$ as an improper fraction.

$\frac{(5 \times 3) + 2}{3} = \frac{17}{3}$

$\frac{17}{3}$

(1)

(c) Write 4.938 correct to 2 decimal places.

4.94

(1)

(d) Write 837.9982 correct to two significant figures.

840

(1)

(e) Write the following in order of size.

$0.7 \quad 83\% \quad \frac{45}{100} \quad 0.07 \quad \frac{7}{10} \quad \frac{7}{12}$

$0.83 \quad 0.45 \quad \quad 0.7 \quad 0.58\dot{3}$

$0.07 \quad \frac{45}{100} \quad \frac{7}{12} \quad \frac{7}{10} \quad 83\%$

(2)

(Total for Question 16 is 6 marks)