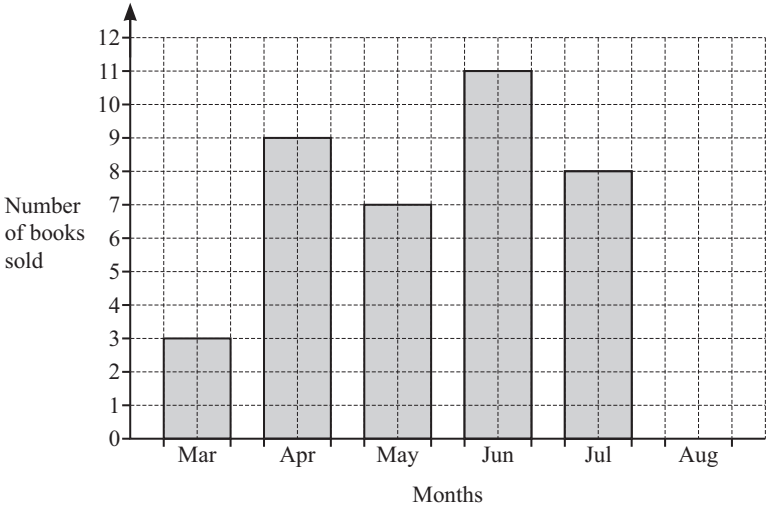


**10** The bar chart shows the number of books sold in a shop in each of five months.



**(a)** 4 books were sold in August.

Complete the bar chart. [1]

**(b)** Calculate the mean number of books sold in the six months.

..... [2]

**11** The temperature at midnight is  $-2^{\circ}\text{C}$ .  
The temperature at noon is  $5^{\circ}\text{C}$ .

**(a)** Find the difference between these temperatures.

.....  $^{\circ}\text{C}$  [1]

**(b)** The temperature at 9 am is  $8^{\circ}\text{C}$  higher than the temperature at midnight.

Work out the temperature at 9 am.

.....  $^{\circ}\text{C}$  [1]

**14** These are the ages, in **months**, of each of 12 children.

|    |    |   |    |    |    |    |    |   |    |    |    |
|----|----|---|----|----|----|----|----|---|----|----|----|
| 11 | 27 | 8 | 10 | 26 | 17 | 28 | 12 | 9 | 13 | 22 | 12 |
|----|----|---|----|----|----|----|----|---|----|----|----|

**(a)** Complete the stem-and-leaf diagram to show this information.

|   |  |
|---|--|
| 0 |  |
| 1 |  |
| 2 |  |

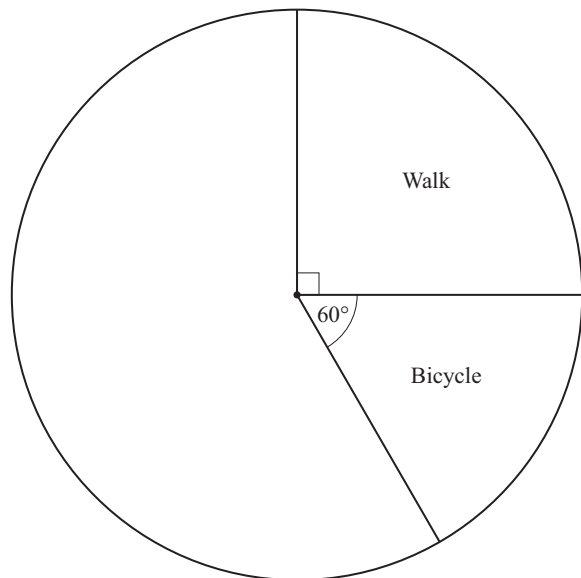
Key: 1 | 7 represents 17 months [2]

**(b)** Find the number of children over 2 **years** old.

..... [1]

**(c)** Show that the median is 12.5 .

- 5 The pie chart shows some information about the way 600 students travel to school.



- (a) Work out the number of students that walk to school.

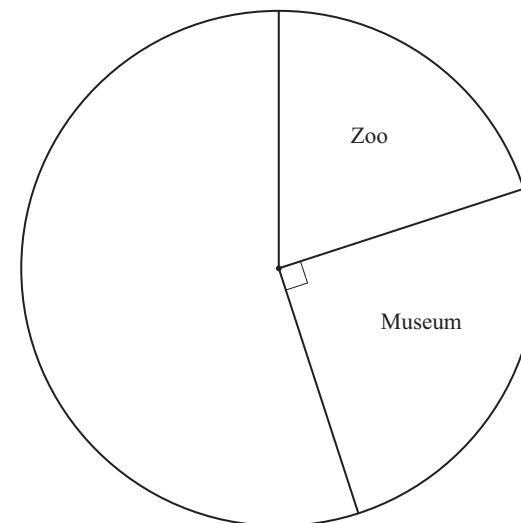
..... [2]

- (b) 120 of the students travel to school by car.  
The remaining students travel by bus.

Complete the pie chart.

[3]

- 12 300 students choose where to go on a trip.  
The students choose either a zoo, a museum, an art gallery or a sports stadium.



- (a) Show that 75 students choose the museum.

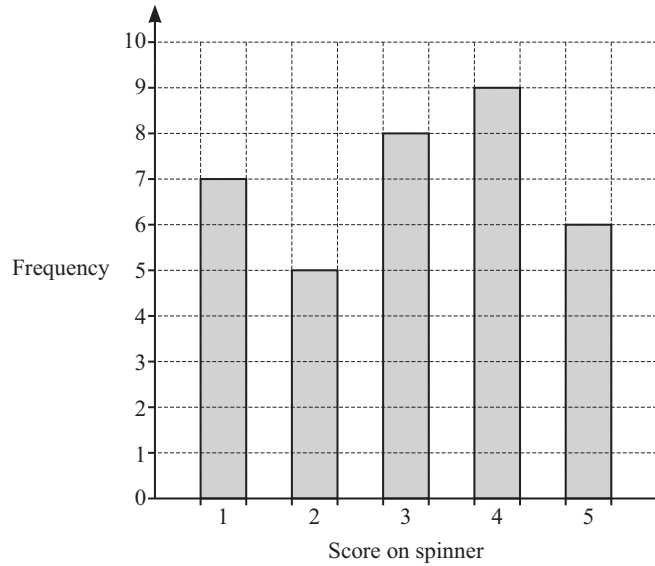
[1]

- (b) 45 students choose the art gallery and 120 students choose the sports stadium.

Complete the pie chart to show this information.

[2]

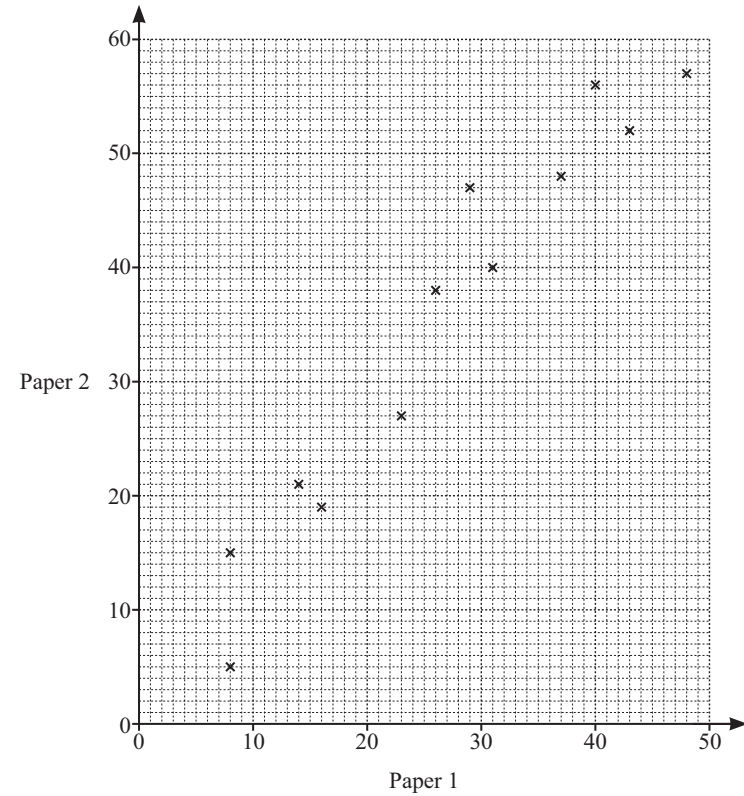
10 The bar chart shows the frequency of each score on a spinner.



Calculate the mean score.

..... [3]

18 A school records the marks students score in Paper 1 and Paper 2 of a subject. The scatter diagram shows the scores for twelve students.



(a) What type of correlation is shown in the scatter diagram?

..... [1]

(b) On the scatter diagram, draw a line of best fit.

[1]

(c) Another student scores 35 on Paper 1.

Use your line of best fit to find an estimate for their score on Paper 2.

..... [1]

9 The table shows some information about the marks scored by a group of students in a test.

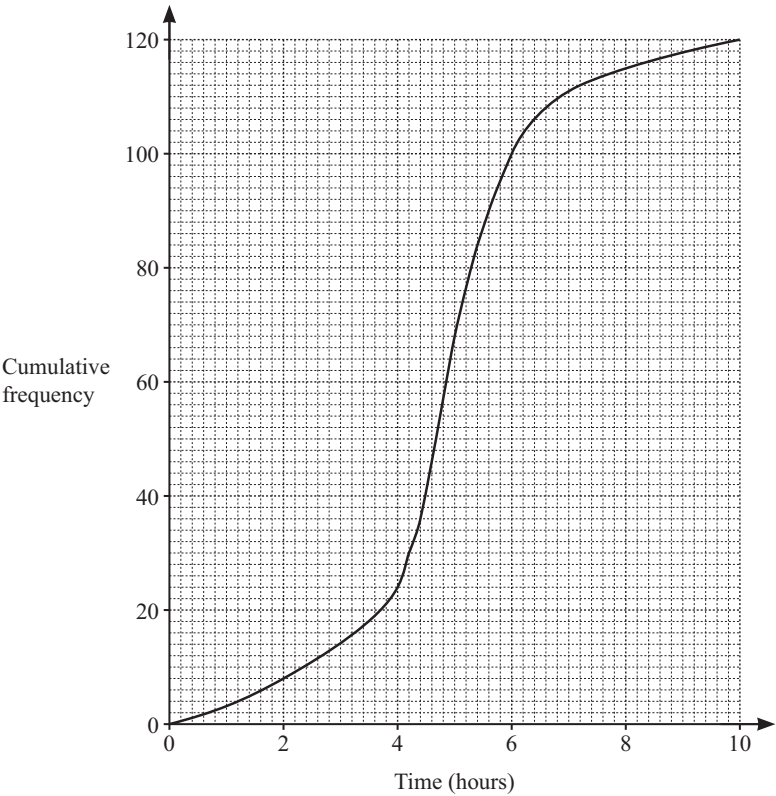
|           |   |   |     |
|-----------|---|---|-----|
| Test mark | 4 | 5 | 8   |
| Frequency | 2 | 4 | $n$ |

The mean mark is 6.

Work out the value of  $n$ .

$n =$  ..... [3]

12 The time spent on the internet by each of 120 adults is recorded for one day.  
The cumulative frequency diagram shows this information.



(a) Use the cumulative frequency diagram to find an estimate of the interquartile range.

..... h [2]

(b) 70% of the adults spent less than  $k$  hours on the internet.

Use the cumulative frequency diagram to find an estimate of the value of  $k$ .

$k =$  ..... [2]