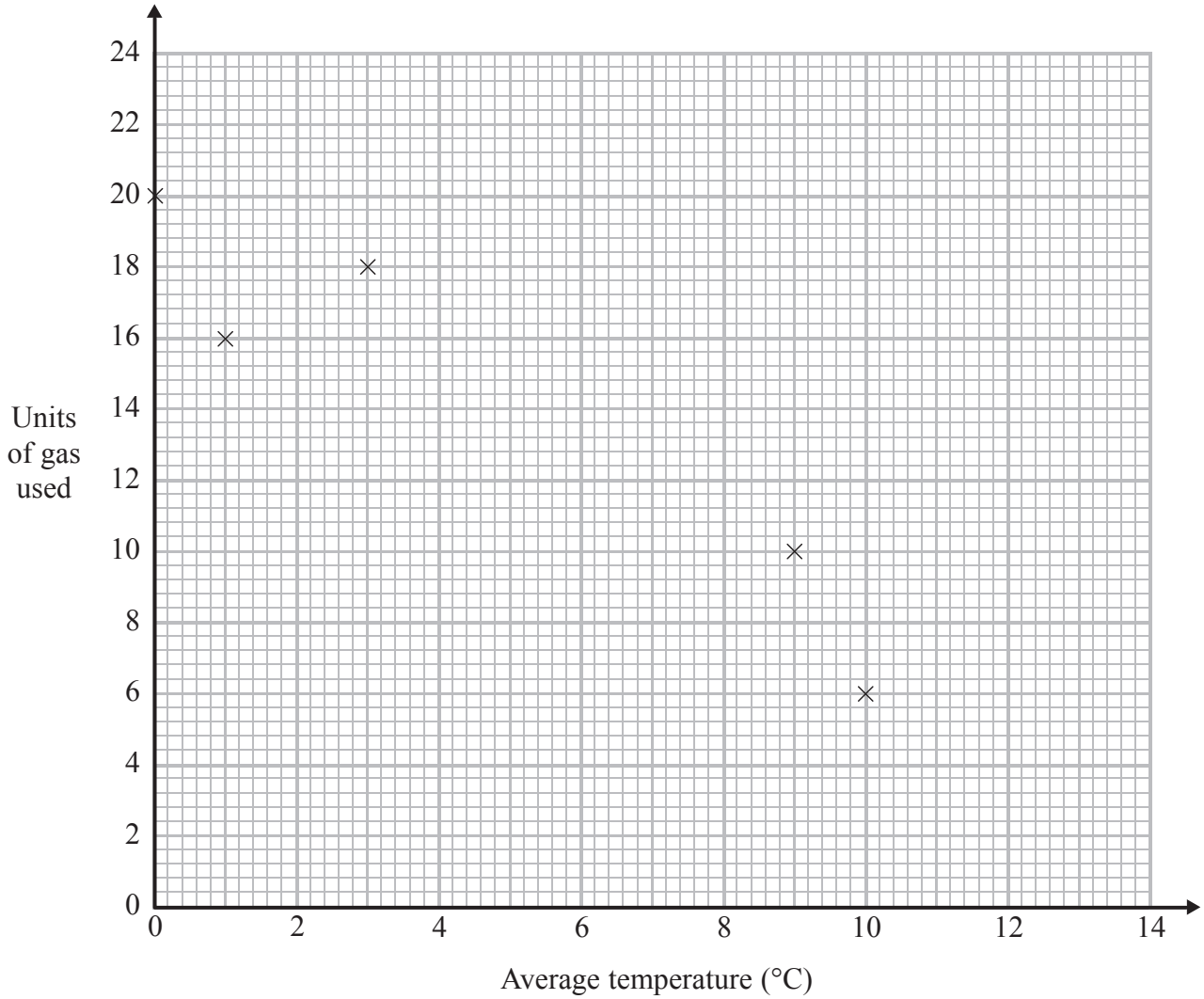
1 The table shows the average temperature on each of seven days and the number of units of gas used to heat a house on these days.

Average temperature (°C)	0	1	3	9	10	12	13
Units of gas used	20	16	18	10	6	6	2



(a) Complete the scatter graph to show the information in the table.
The first 5 points have been plotted for you.

(1)

(b) Describe the relationship between the average temperature and the number of units of gas used.

.....

.....

(1)

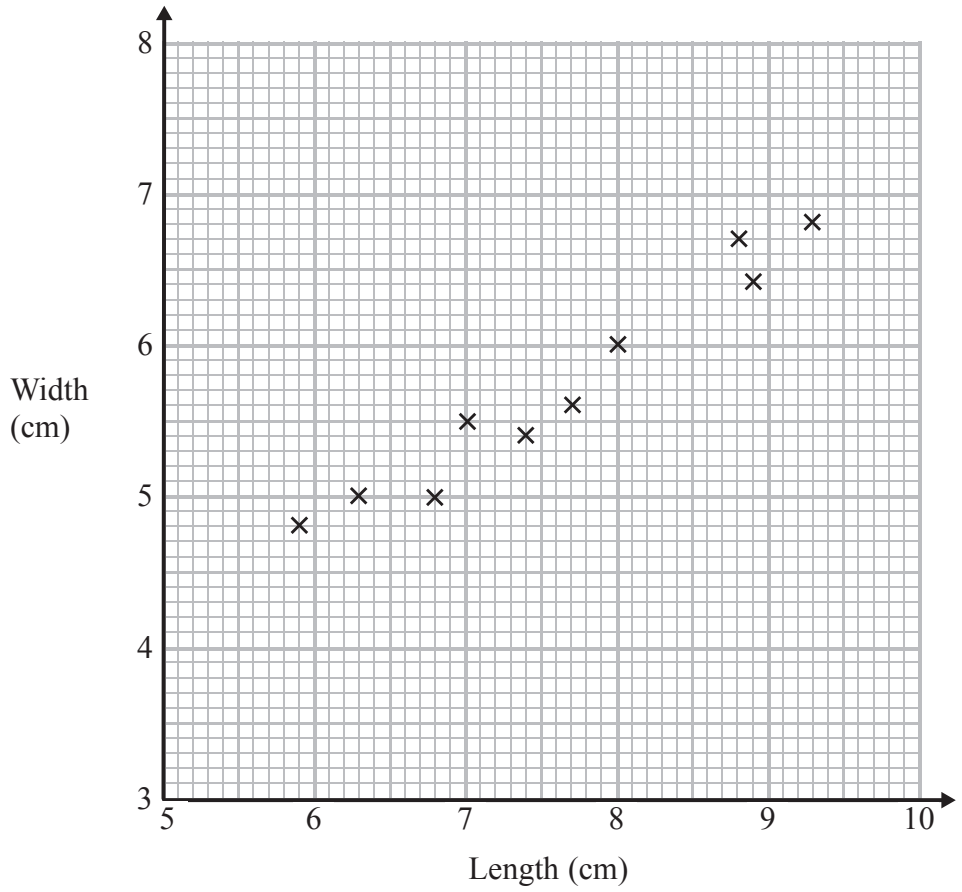
(c) Estimate the average temperature on a day when 12 units of gas are used.

..... °C

(2)

(Total for Question 2 is 4 marks)

2 The scatter graph shows some information about ten pine cones from the same tree.
It shows the length and the width of each pine cone.



(a) Describe the relationship between the length and the width of a pine cone.

.....

.....

(1)

Another pine cone from this tree has a length of 8.4 cm.

(b) Estimate the width of this pine cone.

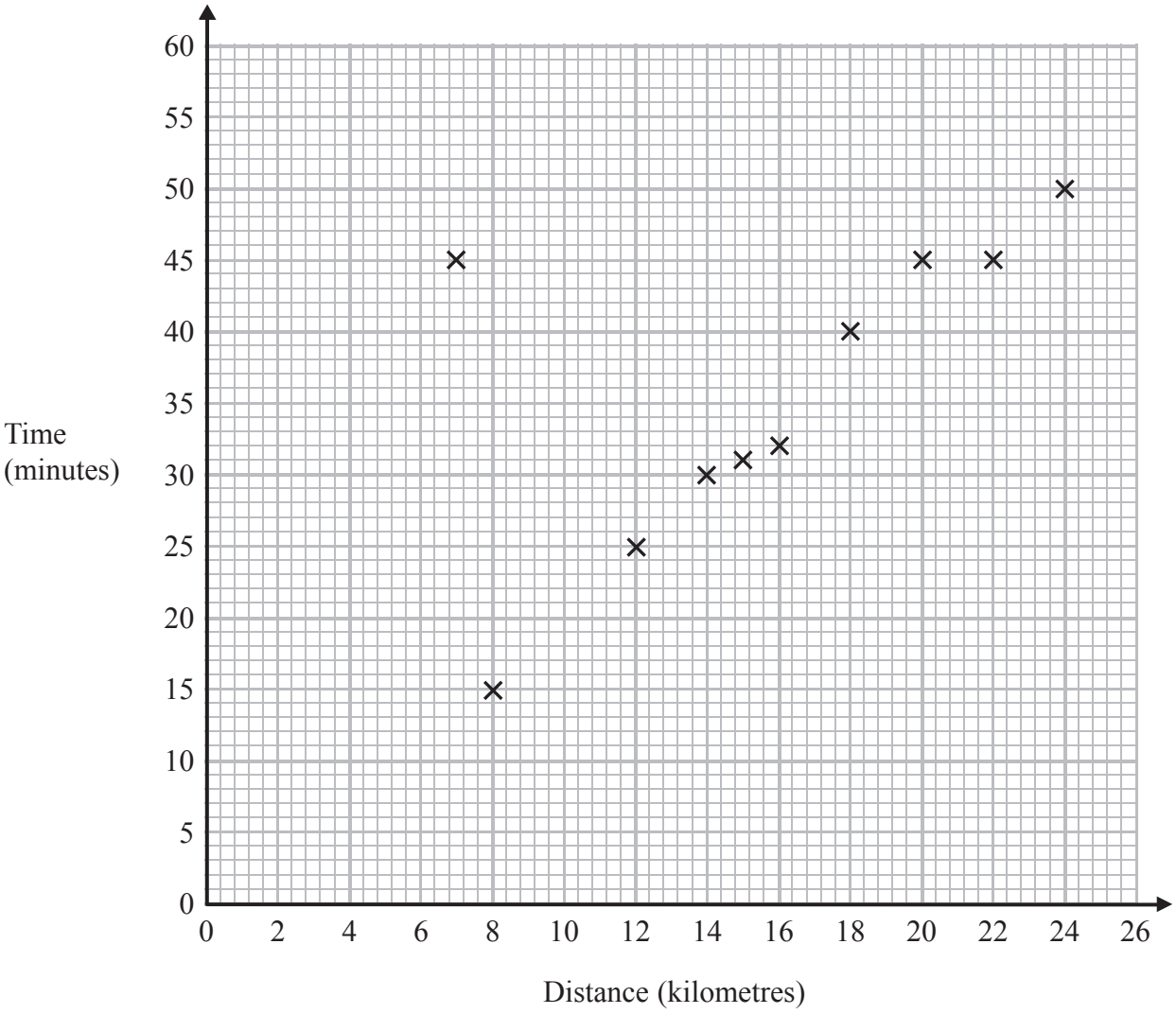
.....cm

(2)

(Total for Question 2 is 3 marks)

3 A delivery driver records for each delivery the distance he drives and the time taken.

The scatter graph shows this information.



For another delivery he drives 22 kilometres and takes 50 minutes.

(a) Show this information on the scatter graph.

(1)

(b) What type of correlation does the scatter graph show?

.....

(1)

The driver has to drive a distance of 10 km for his next delivery.

(c) Estimate the time taken for this delivery.

..... minutes

(2)

During one of the deliveries, the driver was delayed by road works.

(d) Using the graph write down the time taken for this delivery.

..... minutes

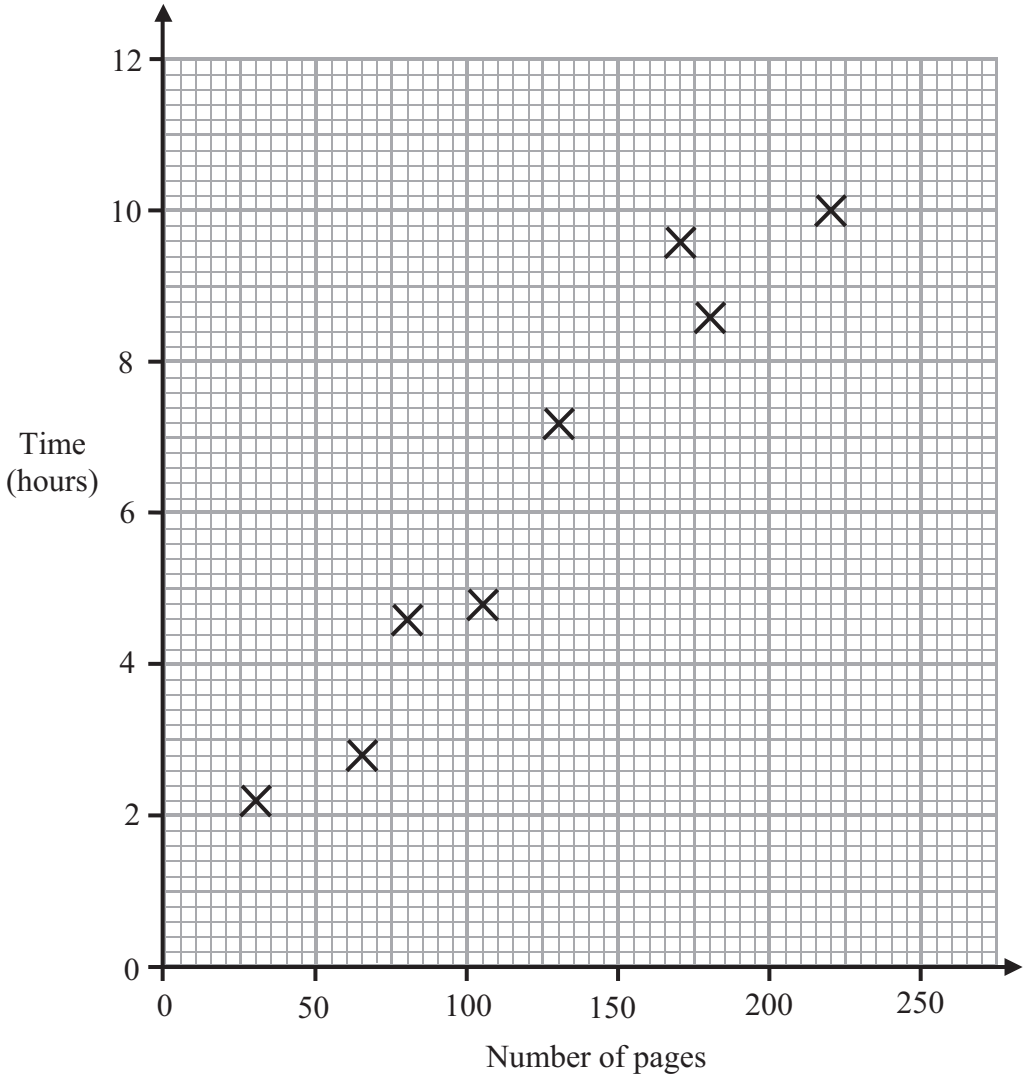
(1)

(Total for Question 3 is 5 marks)

4 Harriet reads eight books.

For each book she recorded the number of pages and the time she takes to read it.

The scatter graph shows information about her results.



(a) Describe the relationship between the number of pages in a book and the time Harriet takes to read it.

.....

(1)

Harriet reads another book.
The book has 150 pages.

(b) Estimate the time it takes Harriet to read it.

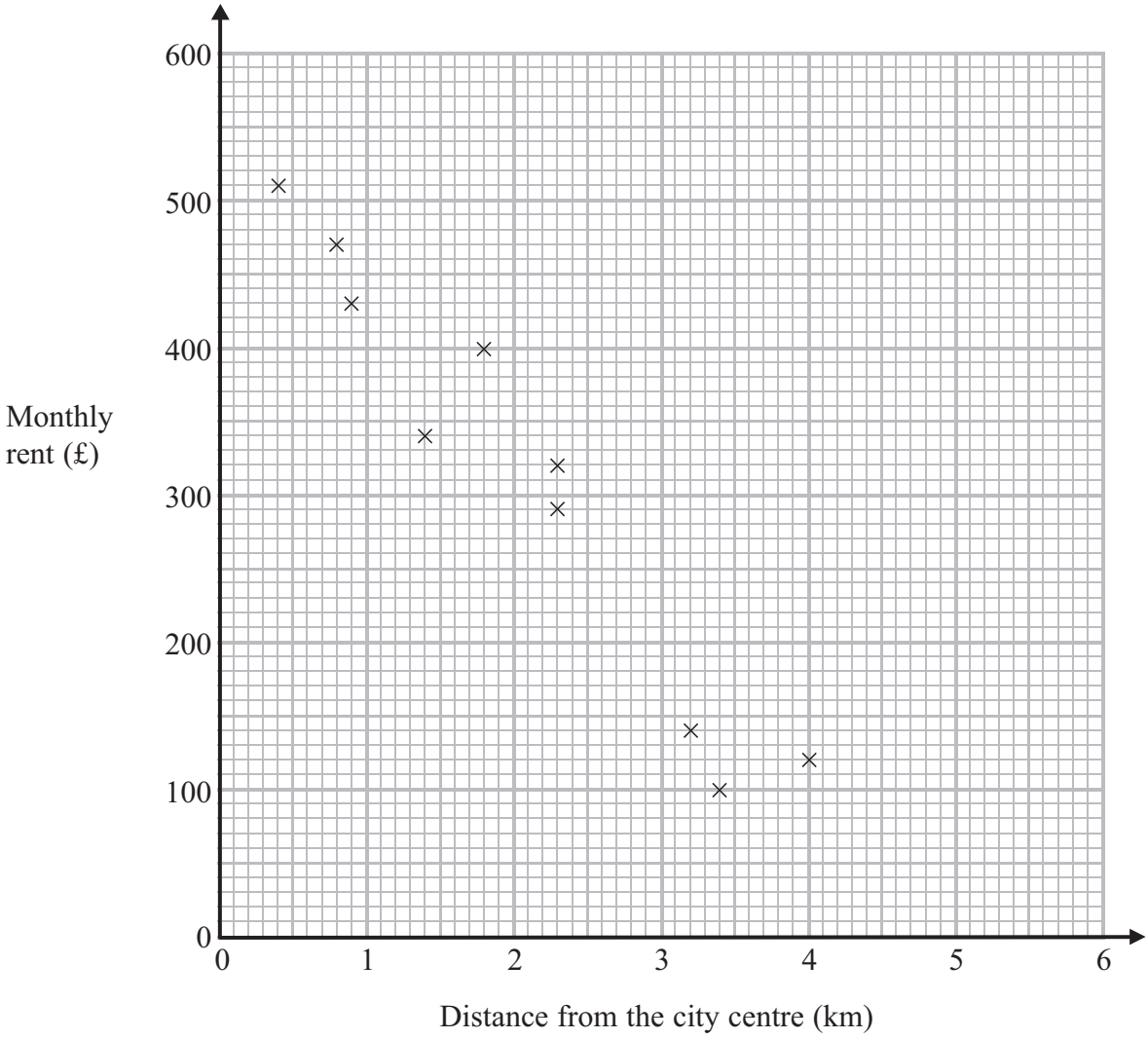
..... hours

(2)

(Total for Question 4 is 5 marks)

5 The scatter graph shows information about 10 apartments in a city.

The graph shows the distance from the city centre and the monthly rent of each apartment.



The table shows the distance from the city centre and the monthly rent for two other apartments.

Distance from the city centre (km)	2	3.1
Monthly rent (£)	250	190

(a) On the scatter graph, plot the information from the table.

(1)

(b) Describe the relationship between the distance from the city centre and the monthly rent.

.....

.....

(1)

An apartment is 2.8 km from the city centre.

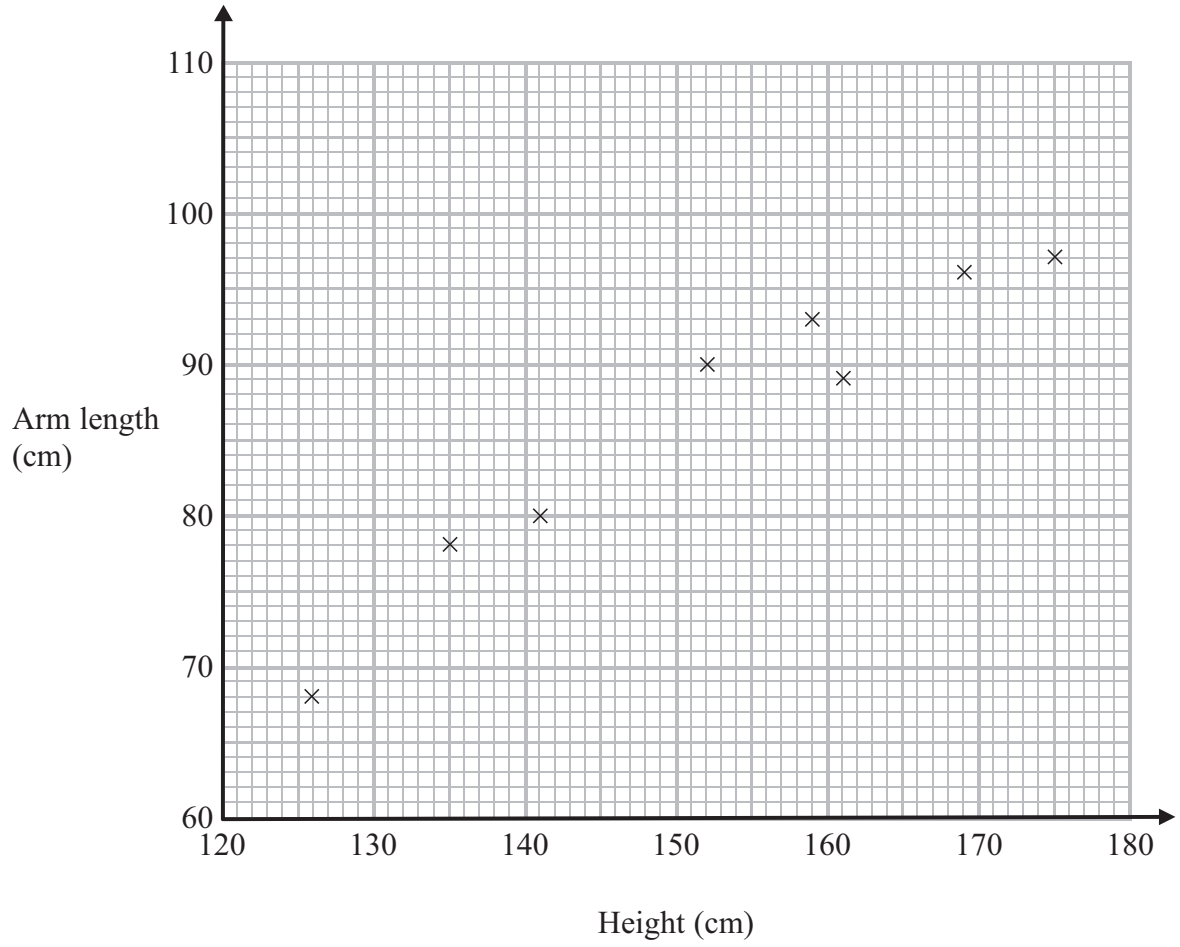
(c) Find an estimate for the monthly rent for this apartment.

£ .....

(2)

(Total for Question 5 is 4 marks)

6 The scatter graph shows information about the height and the arm length of each of 8 students in Year 11



(a) What type of correlation does this scatter graph show?

.....

(1)

A different student in Year 11 has a height of 148 cm.

(b) Estimate the arm length of this student.

.....cm

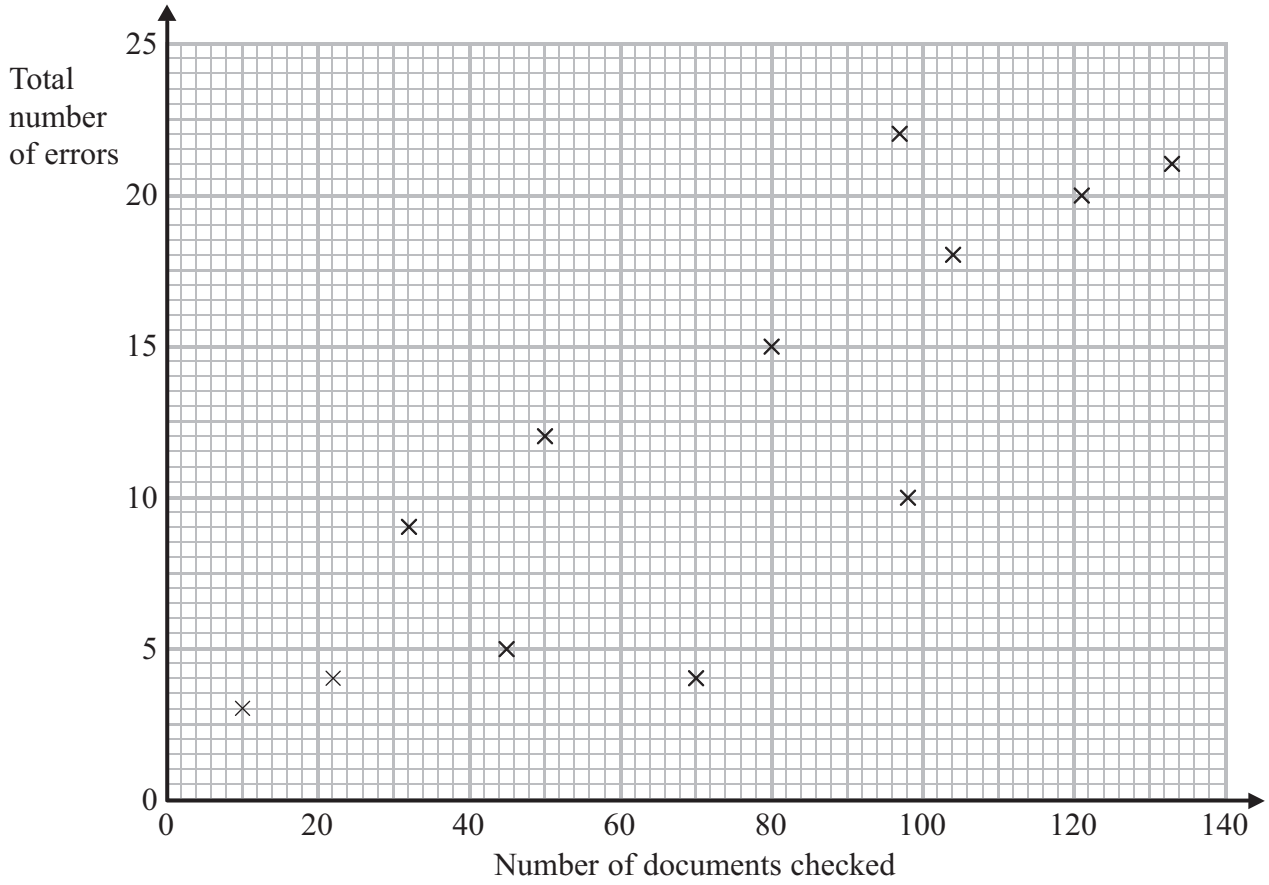
(2)

(Total for Question 6 is 3 marks)

7 A publisher checks documents for errors.

He records the number of documents that are checked each day.
He also records the total number of errors in the documents each day.

The scatter graph shows this information.



On another day 90 documents are checked.
There is a total of 17 errors.

(a) Show this information on the scatter graph.

(1)

(b) Describe the correlation between the number of documents checked and the total number of errors.

.....

(1)

One day 110 documents are checked.

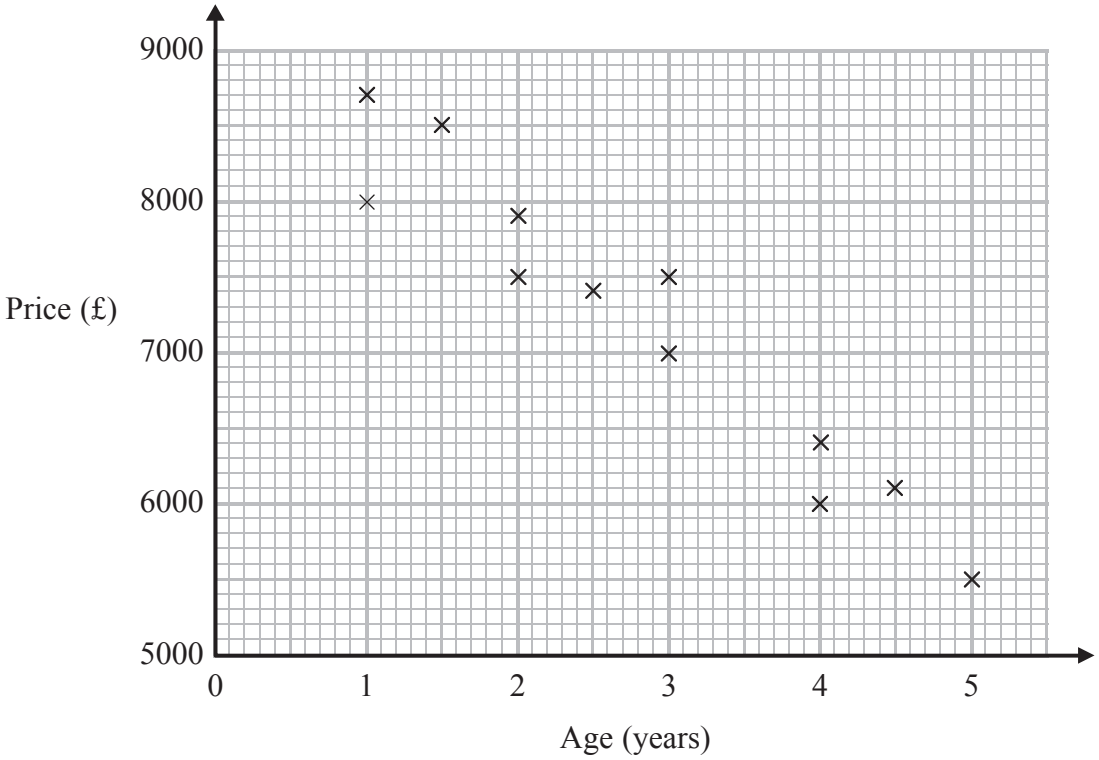
(c) Estimate the total number of errors in these documents.

.....

(2)

(Total for Question 7 is 4 marks)

8 The scatter graph shows information about the age and the price of each of 12 cars of the same model.



(a) Describe the relationship between the age of a car and its price.

.....

.....

(1)

A different car of the same model is $3\frac{1}{2}$ years old.

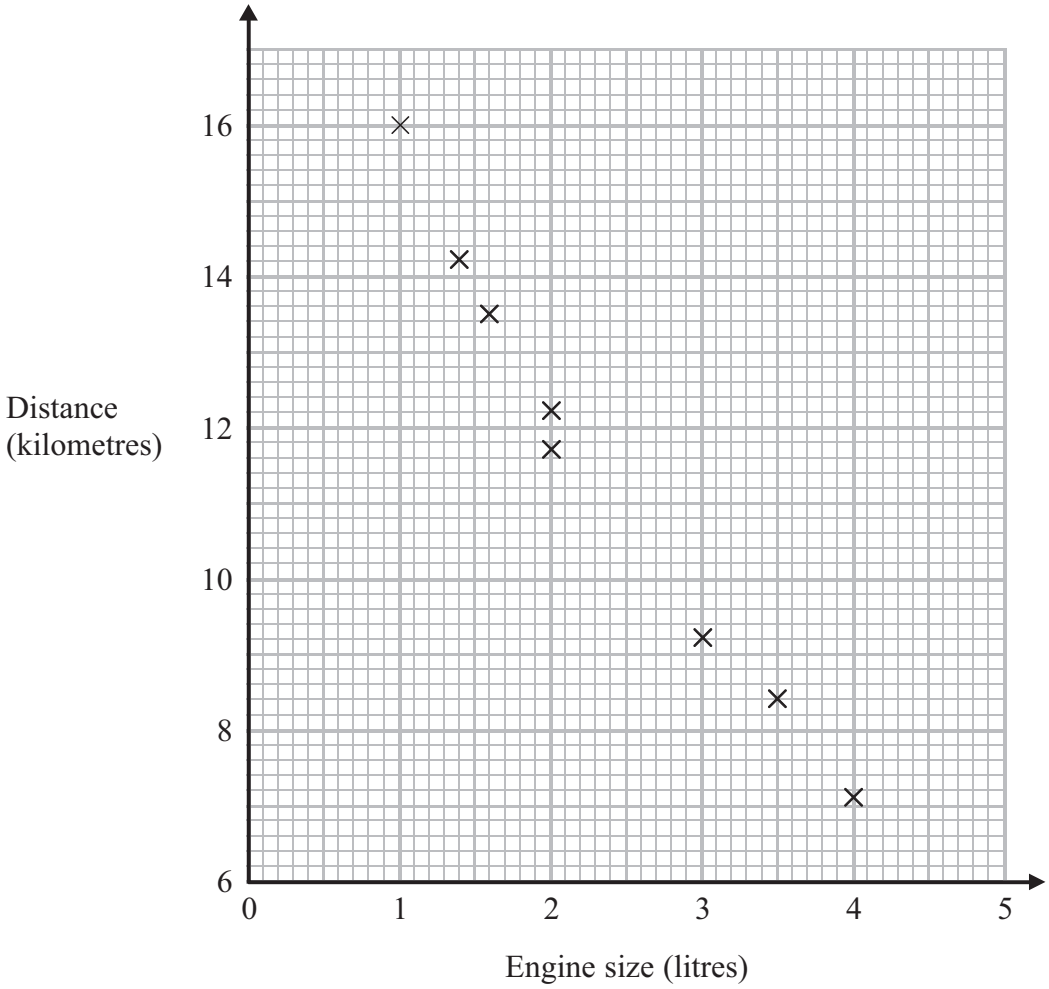
(b) Estimate the price of this car.

£.....

(2)

(Total for Question 8 is 3 marks)

9 The scatter graph shows some information about 8 cars.
For each car it shows the engine size, in litres, and the distance, in kilometres, the car travels on one litre of petrol.



(a) What type of correlation does the scatter graph show?

.....

(1)

A different car of the same type has an engine size of 2.5 litres.

(b) Estimate the distance travelled on one litre of petrol by this car.

..... kilometres

(2)

(Total for Question 9 is 3 marks)