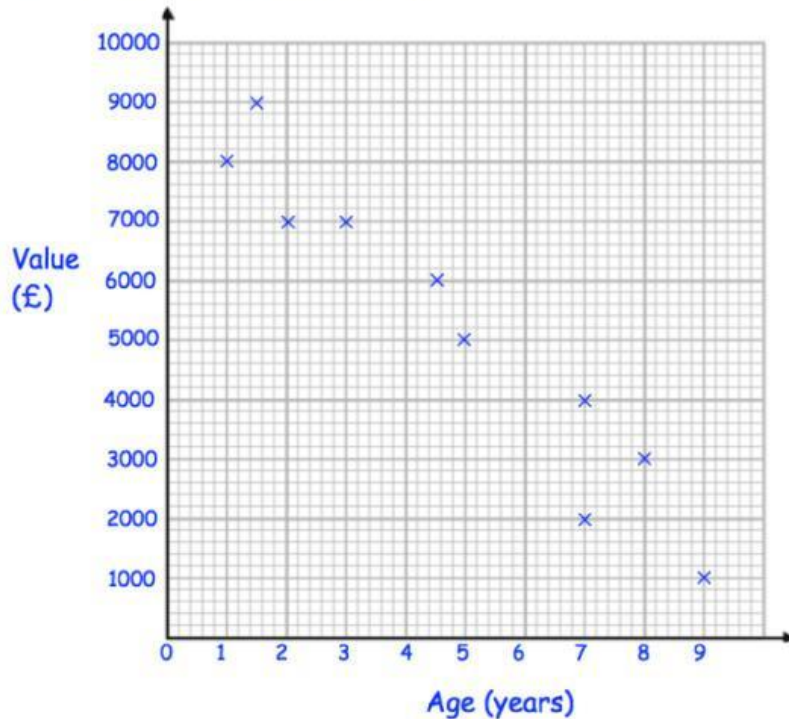


SCATTER GRAPHS

The value of cars in a used car garage are recorded below.
The scatter graph shows this information.

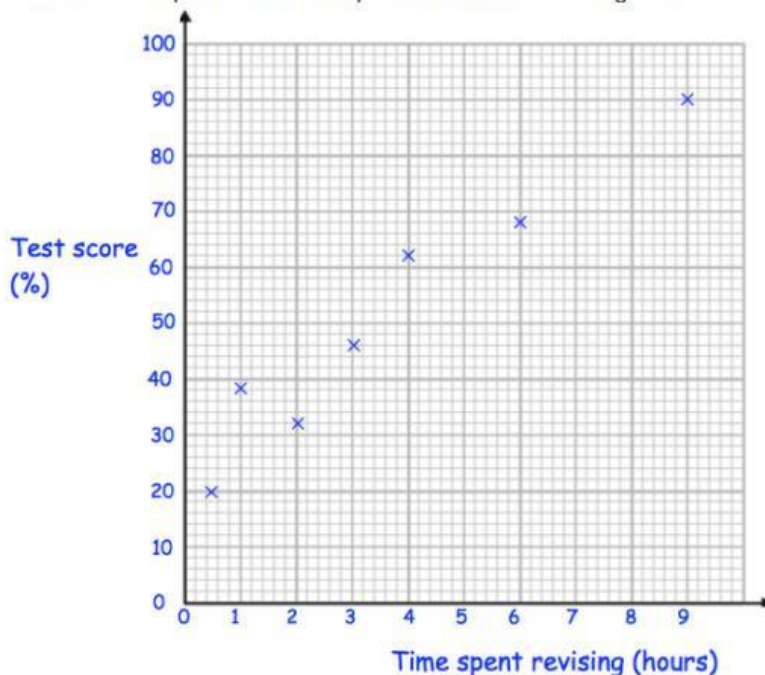


Describe the correlation between value of car and age of the car ?

The table shows the time spent revising and the test scores of ten students.

Time spent revising (hours)	9	0.5	1	4	6	2	3	7	5	8
Test result (%)	90	20	38	62	68	32	46	70	60	86

The first seven points have been plotted on this scatter diagram.

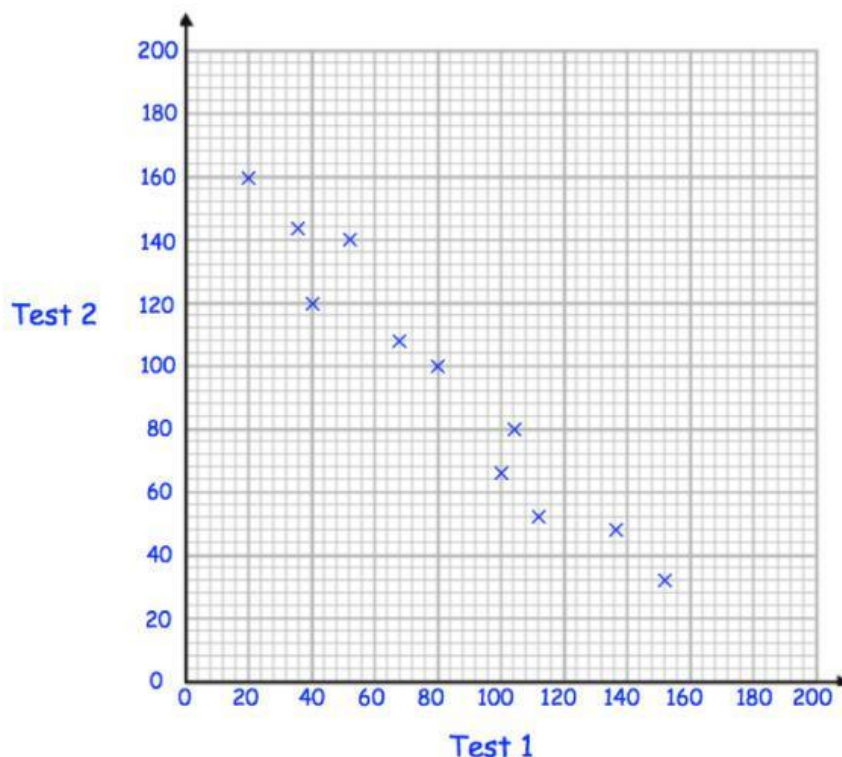


- (i) Predict the score of a student who revised for **3.5 hours** using your line of best fit.
-
- (ii) Which of these statements is best supported by the graph?
- A. More revision guarantees a higher score.
- B. Students who revise more generally tend to score higher.
- C. Test scores are unrelated to revision time.
- D. Every student who revises 5 hours scores exactly 60%.
- (iii) One student revised for **7 hours** and scored **70%**. Is this point above, below or on your line of best fit?
-

Some rugby players take two tests, one measuring speed and the other measuring strength.

- Each test is marked out of 200.

The scatter graph compares the results.



1) A new player scored **120** in **Test 1** and **130** in **Test 2**. Explain whether it is likely to be an outlier.

2) Estimate the Test 2 score of a player who scored 90 in Test 1

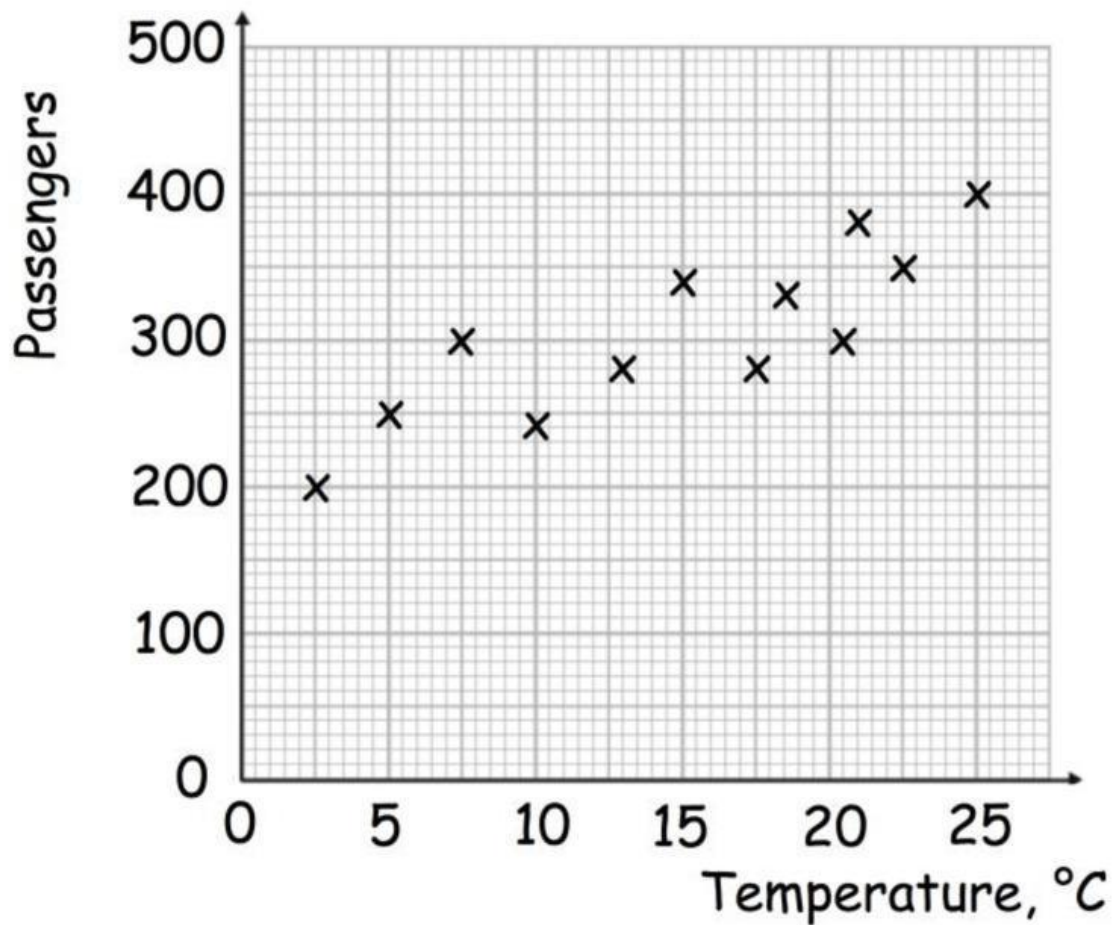
3) **A coach claims:**

"If a player's Test 1 score increases by 20 marks, their Test 2 score always decreases by 20 marks."

Use evidence from the scatter graph to explain whether this statement is correct.

4) Based on the graph, if a player scores **60** in **Test 2**, estimate their likely score in **Test 1**. Explain why your answer is only an estimate.

The scatter graph shows information about the temperature and the number of passengers on 12 train journeys between a city and a seaside town.



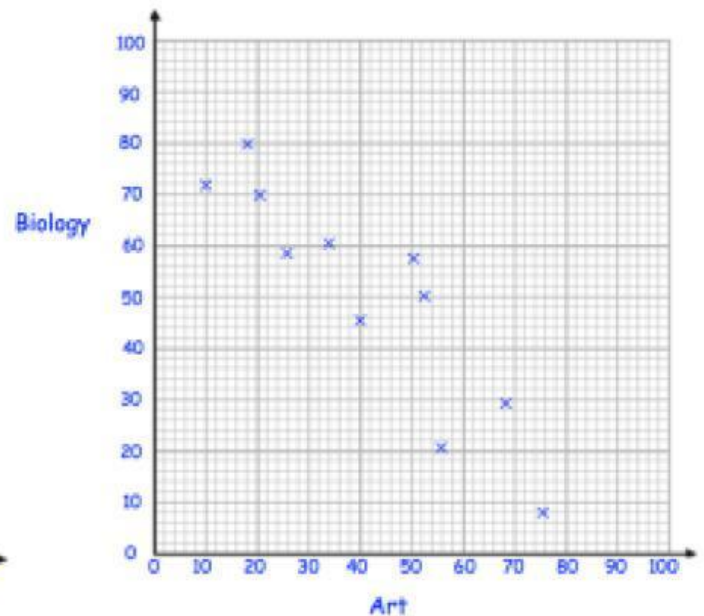
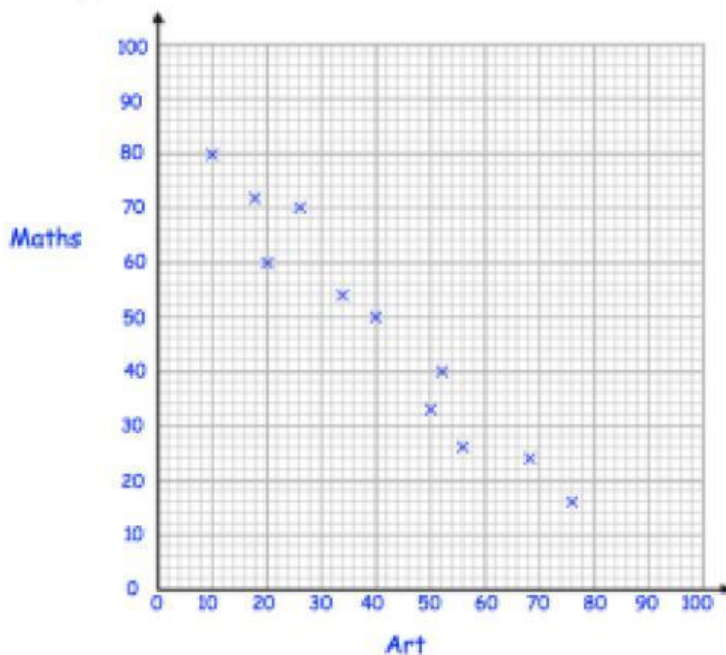
Jessica was the driver for one of the 12 journeys.
The temperature was 21°C

On that journey adult passengers : child passengers = 13 : 7

Work out how many of the passengers on that journey were children.

_____ children

Eleven students sit examinations in Art, Maths and Biology.
Information about the results are shown in the scatter graphs below.



- 1) One of the students scored 50 marks in Art. On that student's report, the ratio of correct answers : incorrect answers in Maths was 3 : 2. Work out the number of correct answers in Maths.

- 2) A student scored 30 marks in Art.
The student's Maths score was used to award house points.
1 house point is awarded for every 5 marks scored.
How many house points did the student receive?

- 3) A student scored 70 marks in Art.
The student answered 40 Biology questions.

Using the Biology score from the graph, how many questions did the student answer correctly?

- 4) A student scored 80 marks in Art. The student's Biology score was 20% higher than their Chemistry score. Work out the student's Chemistry score.