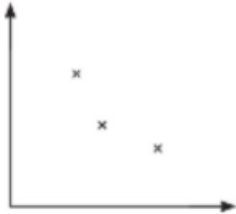




1. The number of bowls of hot soup sold decreases when the temperature rises.
What type of correlation does this statement describe?[1]

0580/22/F/M/21 Q5)

2. Henrik draws this scatter diagram

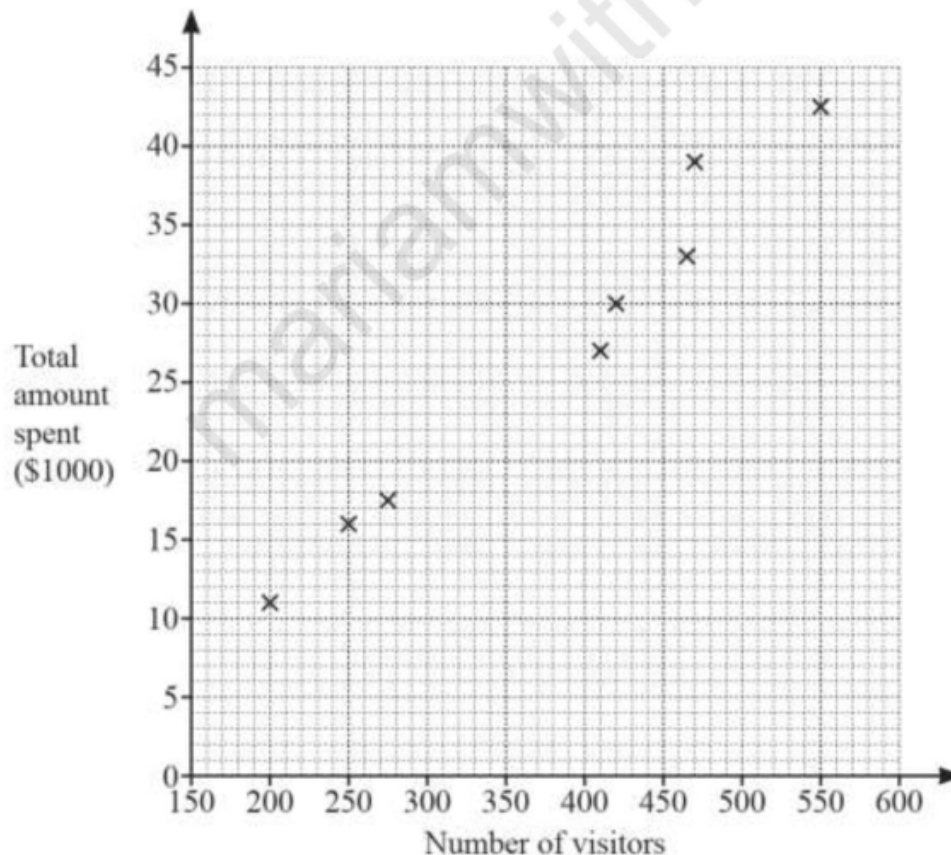


Put a ring around the **one** correct statement about this scatter diagram. [1]

It shows	It is not possible to tell if	It shows negative	It shows positive
no correlation.	there is correlation as there	correlation.	correlation.
	are not enough points.		

0580/22/M/J/21 Q5(a)

3. The scatter diagram shows the number of visitors and the total amount spent, in thousands of dollars, at a zoo on each of eight days.



(a) On one of the eight days there are 410 visitors.

Find the total amount spent by visitors during this day. [1]

(b) Information for the ninth day is shown in the table.

Number of visitors	175
Total amount spent (\$1000)	9

Plot this information on the scatter diagram. [1]

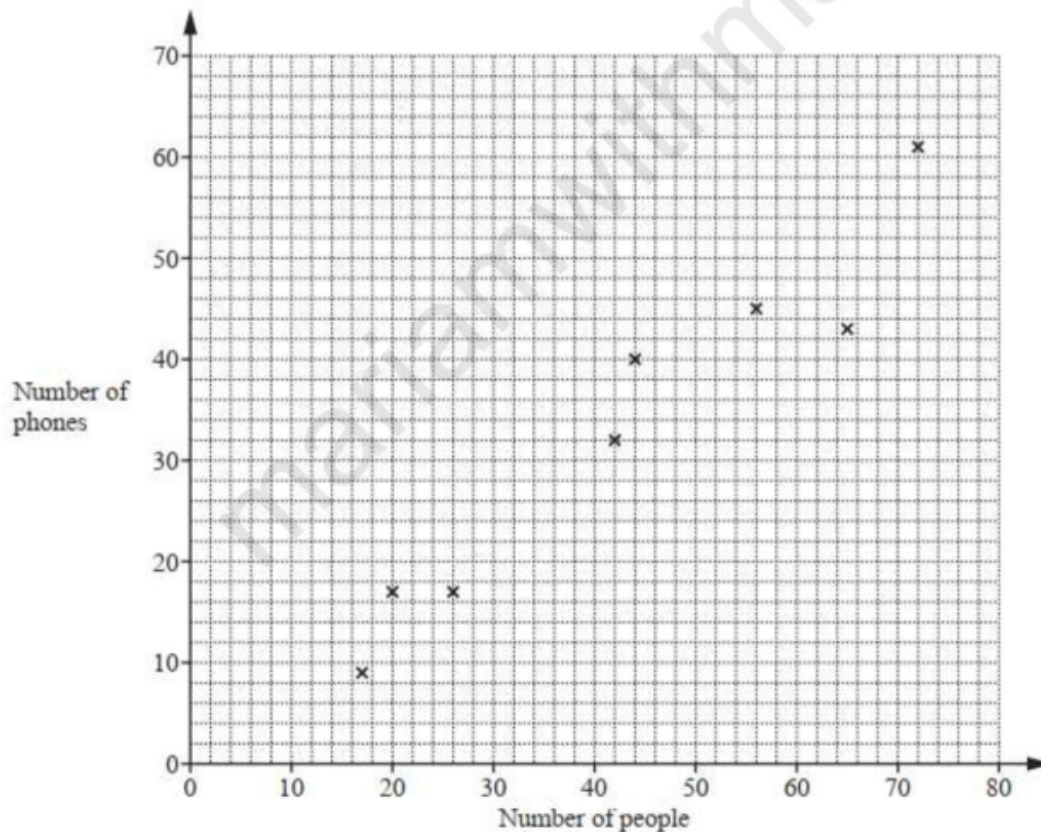
(c) Draw a line of best fit on the scatter diagram. [1]

(d) On the tenth day the total amount spent is \$22000.

Estimate the number of visitors on this day [1]

0580/23/M/J/22 Q7)

4. The scatter diagram shows the number of people and the number of phones in each of 8 buildings.



(a) One of the buildings contains 42 people.

Write down the number of phones in this building. [1]

(b) What type of correlation is shown in the scatter diagram? [1]

0580/23/M/J/19 Q8)

5. Ten athletes compete in both the 100 metre race and the triple jump.

Their results are shown in the scatter diagram.

(a) One of these athletes jumps 15.12m in the triple jump.

Write down his time for the 100 metre race. [1]

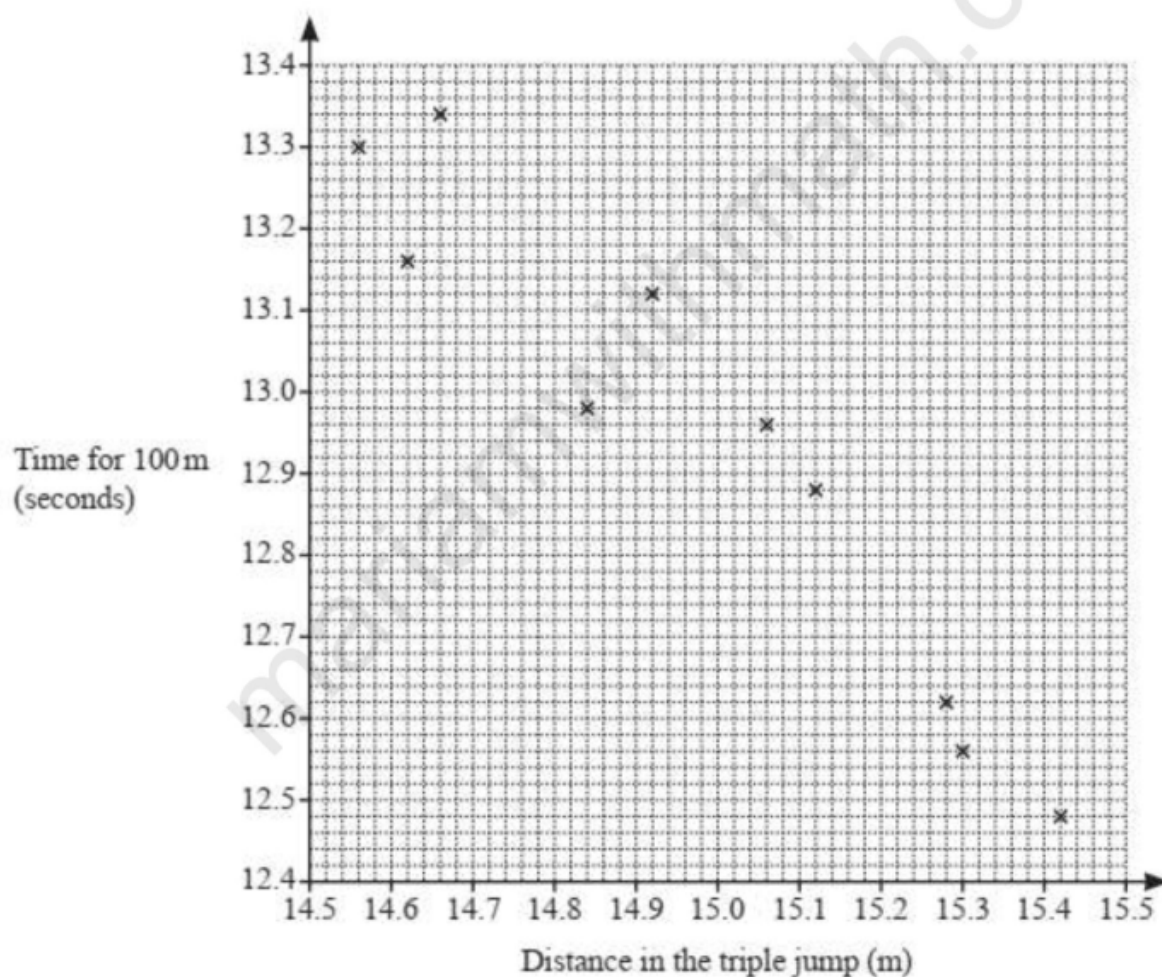
(b) The values for two other athletes are shown in the table

Distance in the triple jump (m)	14.74	15.2
Time for 100m (seconds)	13.2	12.76

On the scatter diagram, plot these points. [1]

(c) On the scatter diagram, draw a line of best fit. [1]

(d) What type of correlation is shown in the scatter diagram? [1]



6. The scatter diagram shows the value, in thousands of dollars, of eight houses in 1996 and the value of the same houses in 2016.

(a) One of these eight houses had a value of \$70 000 in 1996.

Write down the value of this house in 2016. [1]

(b) The values of two more houses are shown in the table.

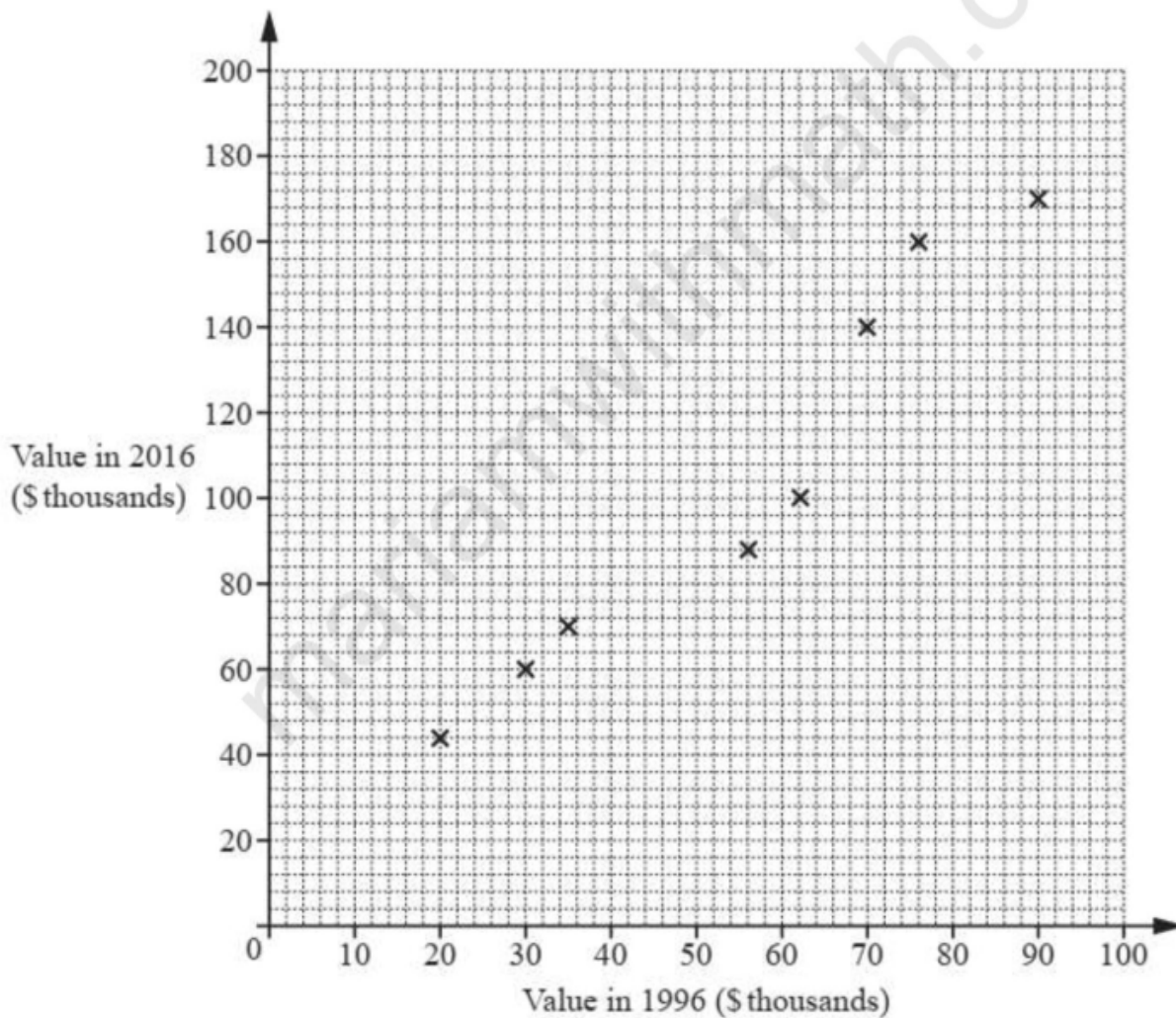
Value in 1996 (\$ thousands)	40	80
Value in 2016 (\$ thousands)	80	150

On the scatter diagram, plot these values. [1]

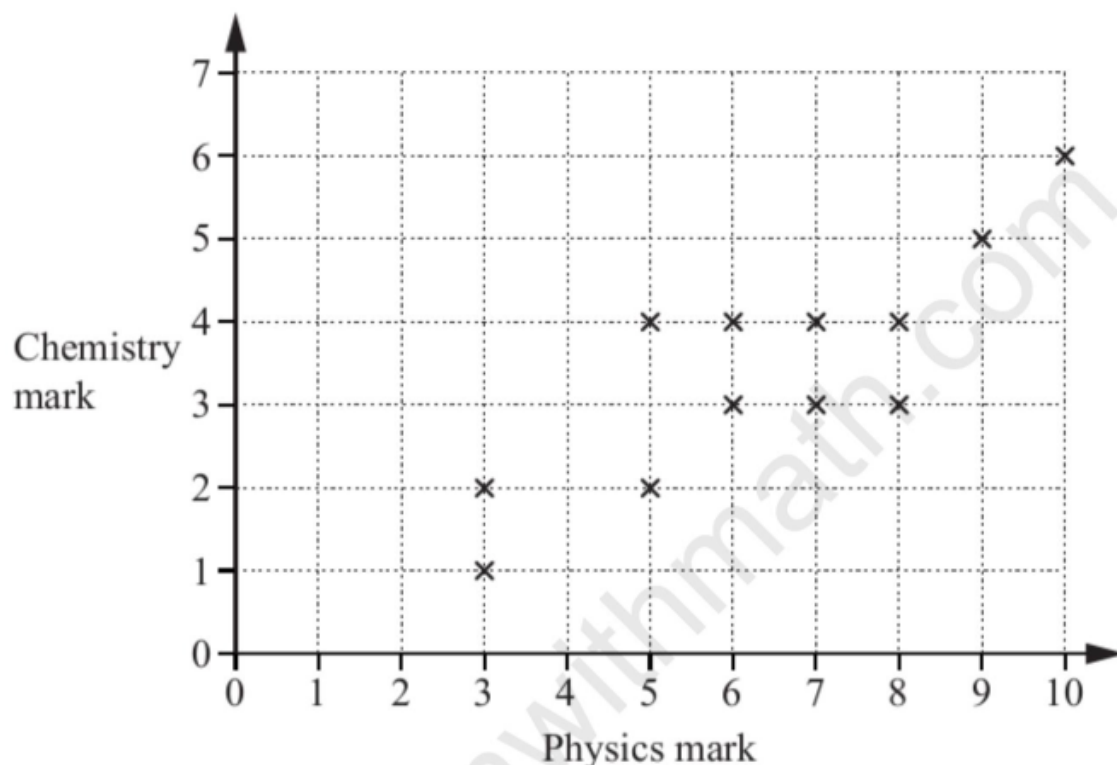
(c) On the scatter diagram, draw a line of best fit. [1]

(d) Another house had a value of \$50 000 in 1996.

Find an estimate of the value of this house in 2016. [1]



7. (a) The scatter diagram shows the physics mark and the chemistry mark for each of 12 students.
- What type of correlation is shown in the scatter diagram? [1]
 - On the scatter diagram, draw a line of best fit. [1]
 - Find an estimate of the chemistry mark for another student who has a physics mark of 4. [1]



0580/43/M/J/18 Q3

8. Six students revise for a test.

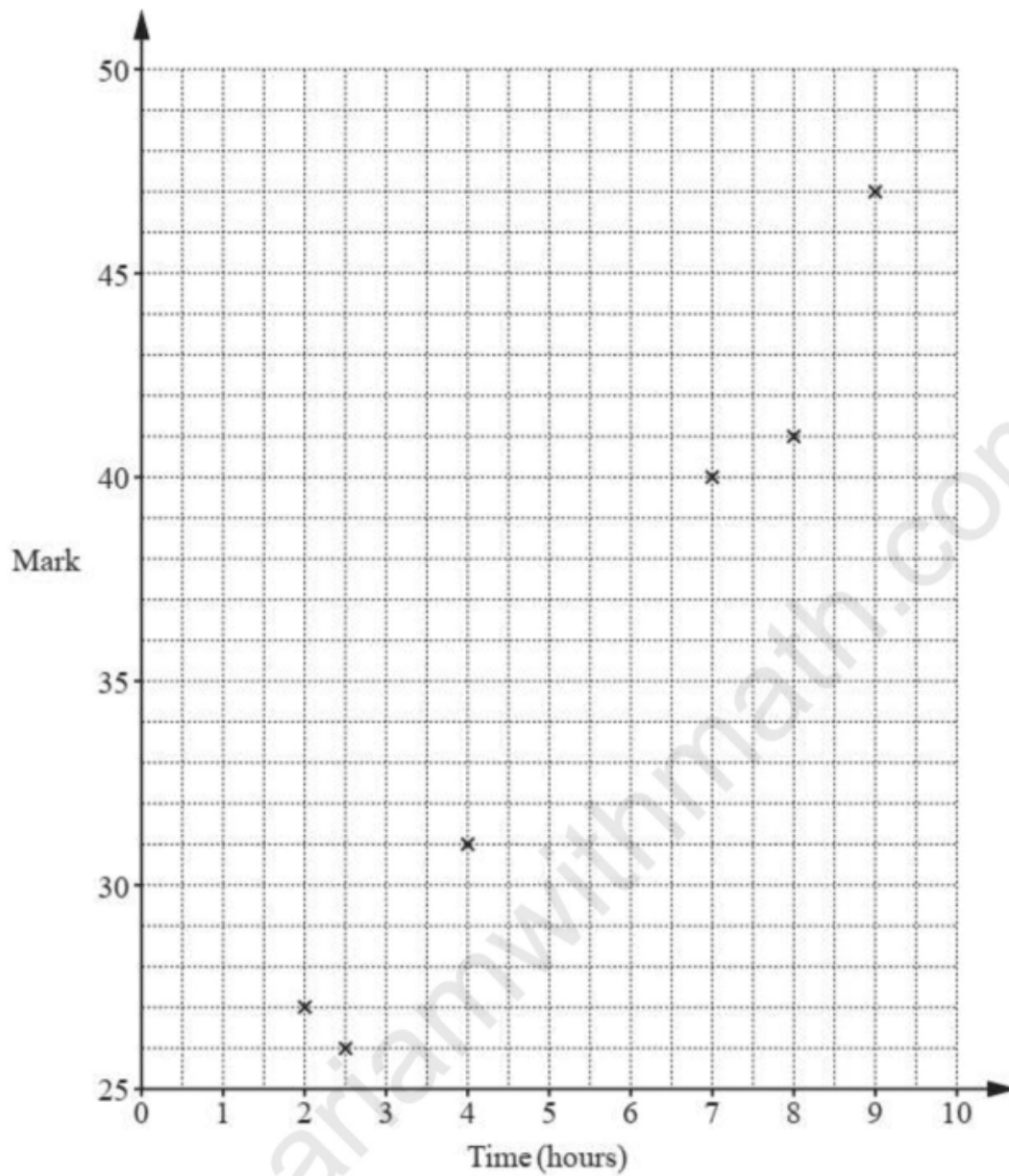
The scatter diagram shows the time, in hours, each student spent revising and their mark in the test.

- (a) The data for two more students is shown in the table.

Time (hours)	4.5	6.5
Mark	33	35

Plot these two points on the scatter diagram. [1]

- What type of correlation is shown on the scatter diagram? [1]
- Draw a line of best fit on the scatter diagram. [1]
- Another student spent 5.5 hours revising.
Estimate a mark for this student. [1]



0580/21/M/J/17 Q16)(a)

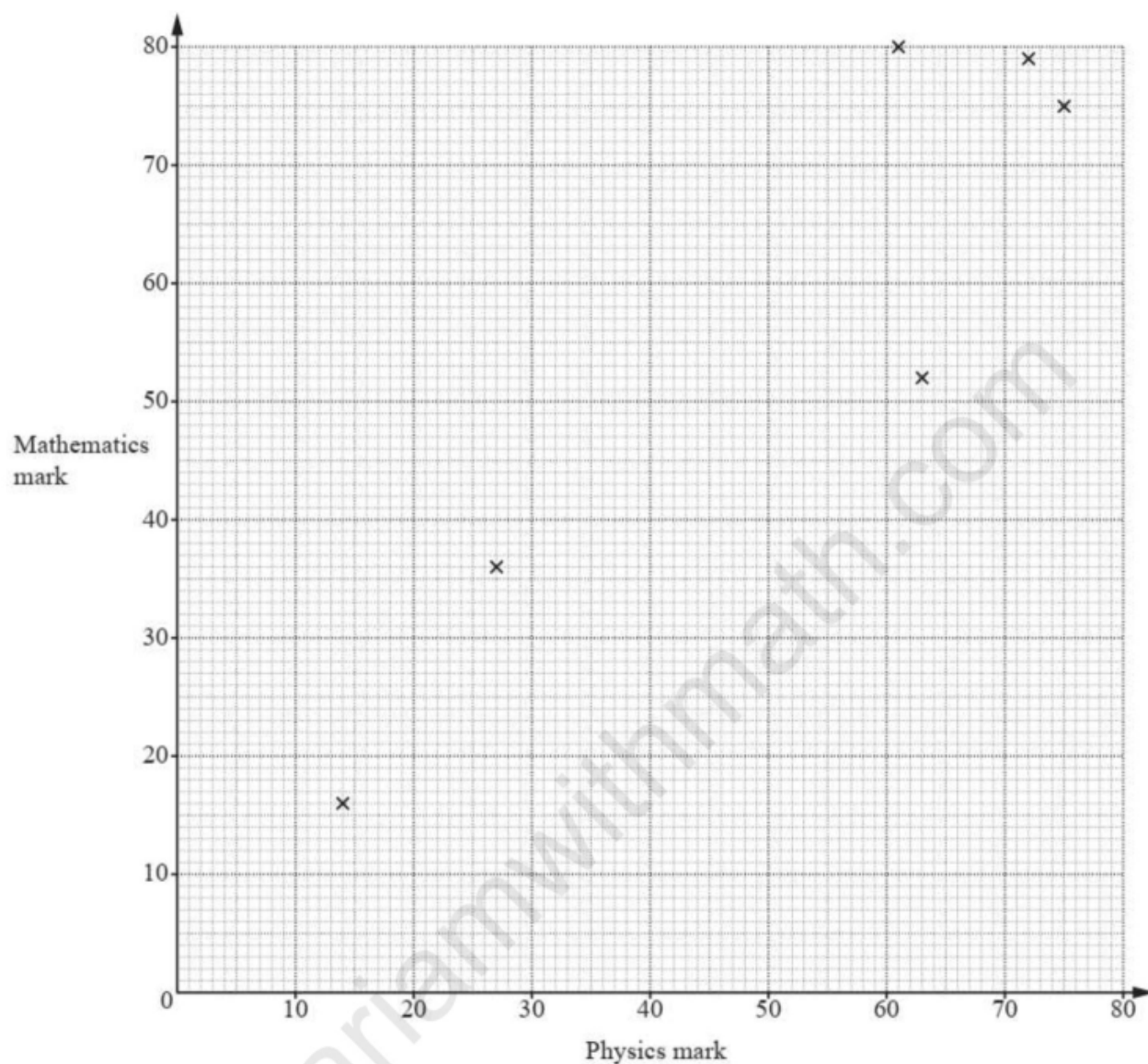
9. (a) The table shows the marks gained by 10 students in their physics test and their mathematics test

Physics mark	63	61	14	27	72	75	44	40	28	50
Mathematics mark	52	80	16	36	79	75	51	35	24	63

(i)

Complete the scatter diagram below. The first six points have been plotted for you. [2]

(ii) What type of correlation is shown in the scatter diagram? [1]



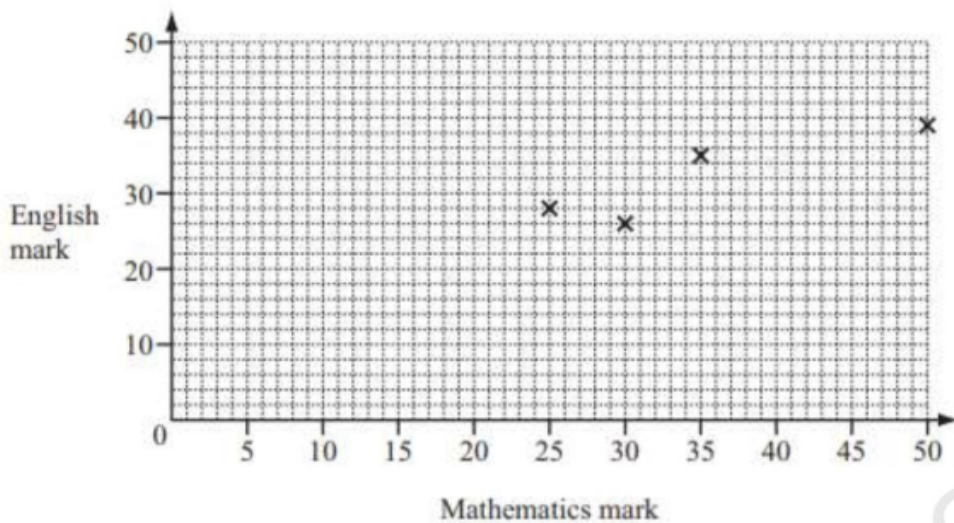
0580/43/M/J/17 Q8(a)

10. The table shows the test marks in Mathematics and English for 10 students.

Mathematics mark	30	50	35	25	5	39	48	40	10	15
English mark	26	39	35	28	9	37	45	33	16	12

(a) (i) On the grid, complete the scatter diagram to show the Mathematics and English marks for the

10 students. The first four points have been plotted for you.



[2]

(ii) What type of correlation does your scatter diagram show?[1]

(iii) Draw a line of best fit on the grid. [1]

(iv) Ann missed the English test but scored 22 marks in the Mathematics test. Use your line of best fit to estimate a possible English mark for Ann. [1]

0580/42/M/J/12 Q1)(a)

Answers

Q1) 0580/22/F/M/21 Q5) negative

Q2) 0580/22/M/J/21 Q5(a) it is not possible

Q3) 0580/23/M/J/22 Q7) (a)27000 (d)300 to 350

Q4) 0580/23/M/J/19 Q8)(a)32 (b)positive

Q5) 0580/23/O/N/19 Q16) (a) 12.88 (d) negative

Q6) 0580/22/M/J/18 Q21 (a) 140 000 (b) Points correctly plotted at (40, 80) and (80, 150)

(c) Correct ruled line of best fit (d) 80 000 to 110 000

Q7) 0580/43/M/J/18 Q3(a) (i) Positive (ii) Correct ruled line (iii) 2

Q8) 0580/21/M/J/17 Q16)(a) points plotted at (4.5, 33) and (6.5, 35) (b) Positive (c) Correct ruled line (d) 33.5 to 37.5

Q9) 0580/43/M/J/17 Q8(a) (i) 4 points correctly plotted (ii) Positive

Q10) 0580/42/M/J/12 Q1)(a) (i) 6 correct plots (ii) Positive (iii) Line of best fit (around 20)