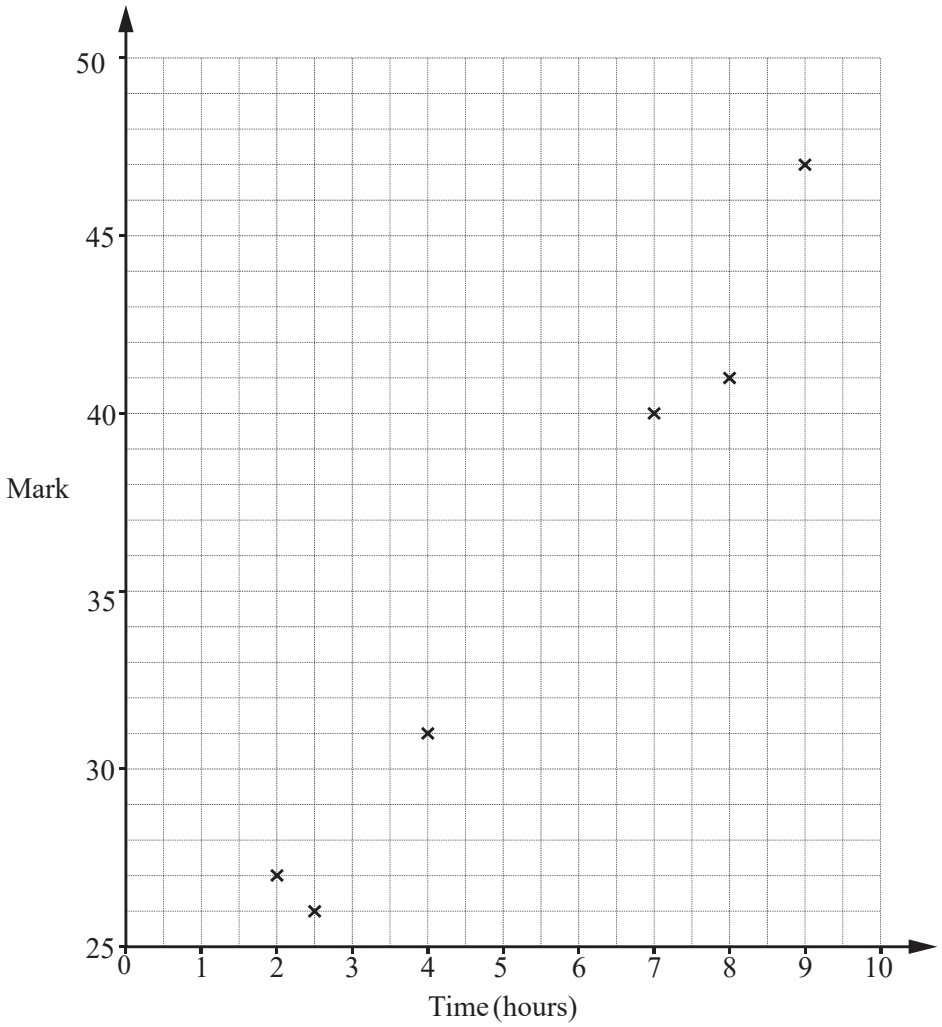
EXAM PAPERS PRACTICE

Displaying Data

Question Paper

Question 1

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]

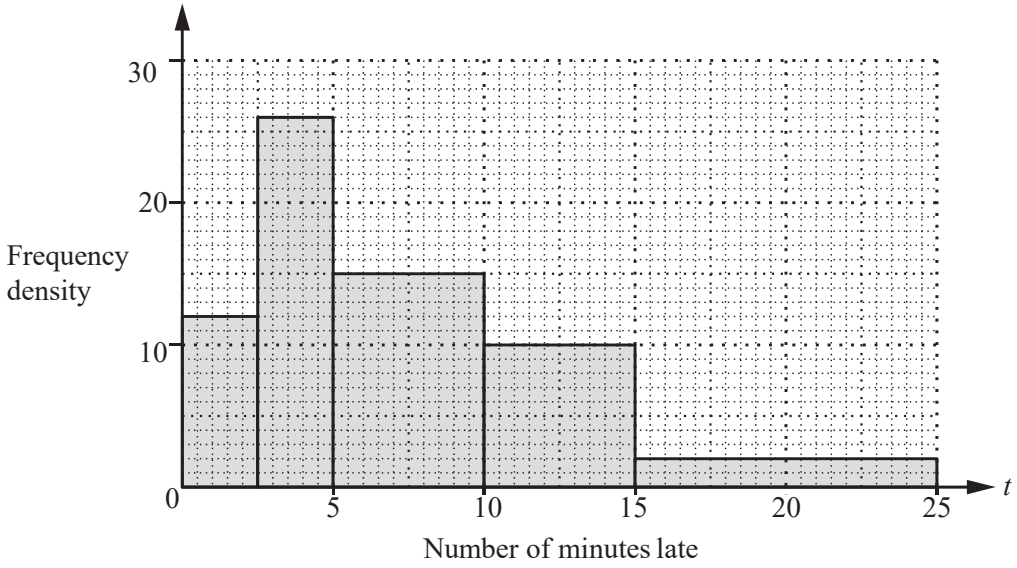
(b) What type of correlation is shown on the scatter diagram?
[1]

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

(d) Another student spent 5.5 hours revising.

Estimate a mark for this student. [1]

Deborah records the number of minutes late, t, for trains arriving at a station.
The histogram shows this information.



(a) Find the number of trains that Deborah recorded. [2]

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(b) Calculate the percentage of the trains recorded that arrived more than 10 minutes late. [2]

Question 3

Raj measures the height, h cm, of 70 plants.
The table shows the information.

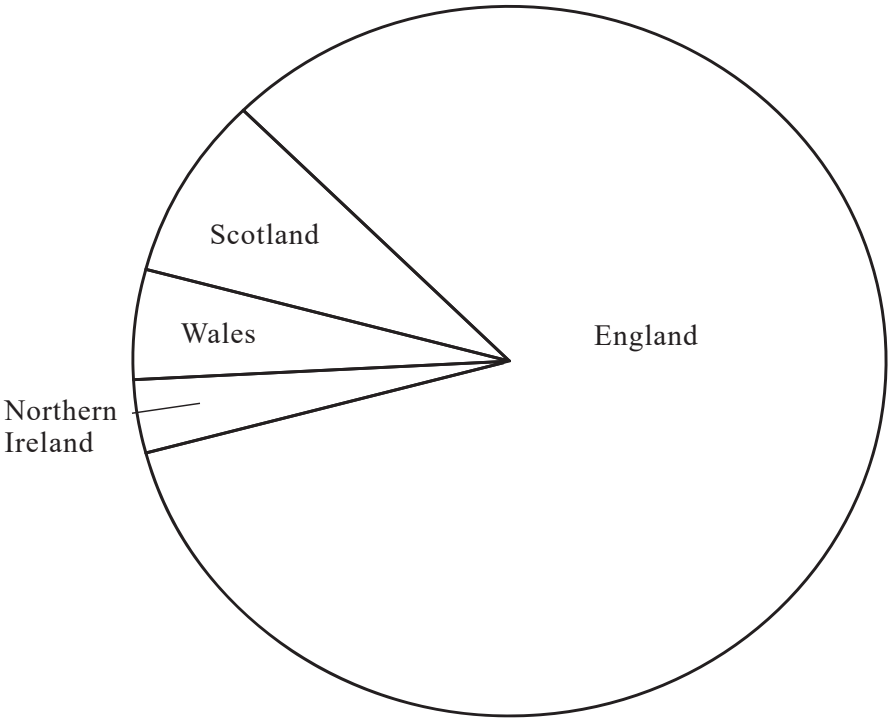
Height (h cm)	$10 < h \leqslant 20$	$20 < h \leqslant 40$	$40 < h \leqslant 50$	$50 < h \leqslant 60$	$60 < h \leqslant 90$
Frequency	7	15	27	13	8

Calculate an estimate of the mean height of the plants.

[4]

Question 4

The populations of the four countries of the United Kingdom, in the year 2000, are shown on the pie chart below.



Taking measurements from the pie chart, complete the table.

Country	Population (millions)
England	
Scotland	
Wales	
Northern Ireland	2

[3]

Question 5

The table shows some information about the mass, m grams, of 200 bananas.

Mass (m grams)	$90 < m \leqslant 110$	$110 < m \leqslant 120$	$120 < m \leqslant 125$	$125 < m \leqslant 140$
Frequency	40	70	60	30
Height of column in histogram (cm)			6	

Complete the table.

[4]

Question 6

The four sector angles in a pie chart are $2x°$, $3x°$, $4x°$ and $90°$.

Find the value of x. [2]

Question 7

Michelle sells ice cream.

The table shows how many of the different flavours she sells in one hour.

Flavour	Vanilla	Strawberry	Chocolate	Mango
Number sold	6	8	9	7

Michelle wants to show this information in a pie chart.

Calculate the sector angle for mango. [2]

Question 8

Bruce plays a game of golf.

His scores for each of the 18 holes are shown below.

2 3 4 5 4 6 2 3 4

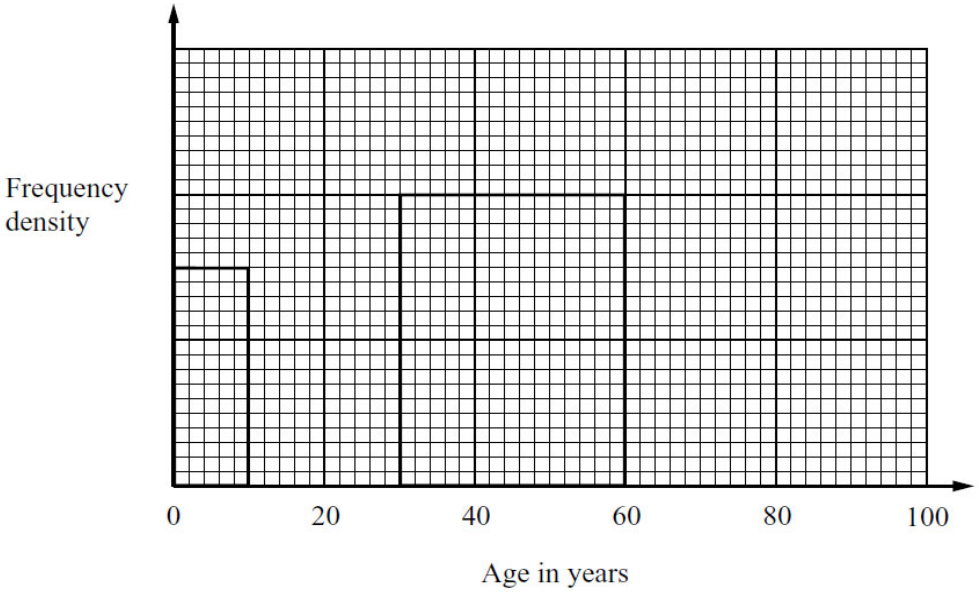
4 5 3 4 3 5 4 4 4

The information is to be shown in a pie chart.

Calculate the sector angle for the score of 4. [2]

A doctor's patients are grouped by age, as shown in the table and the histogram below.

Age (x years)	$0 \leq x < 10$	$10 \leq x < 30$	$30 \leq x < 60$	$60 \leq x < 100$
Number of patients	300	600		880



(a) Complete the following:

1 cm^2 represents ..... patients. [1]

(b) Use the histogram to fill in the blank in the table. [1]

(c) Draw the missing two rectangles to complete the histogram. [2]