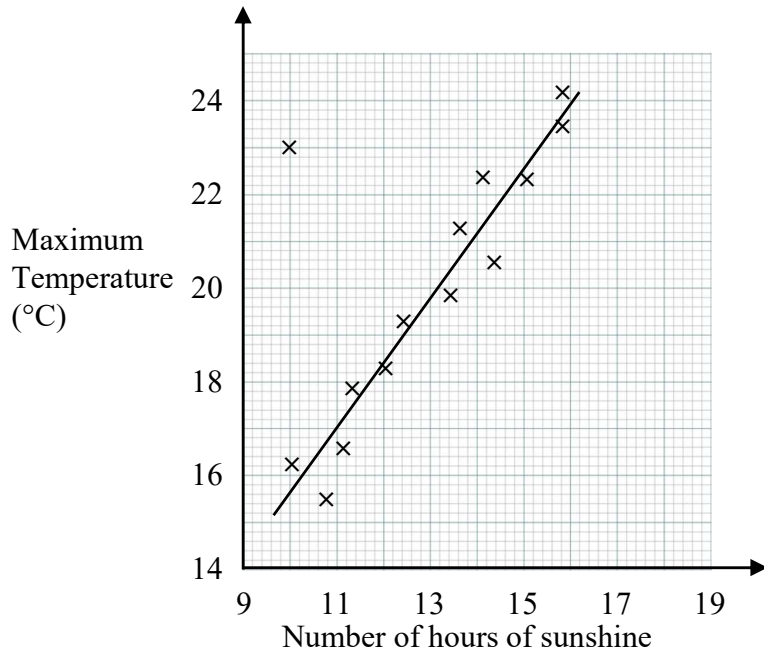




1 The scatter graph shows the maximum temperature and the number of hours of sunshine in fourteen American cities in one day.



One of the points is an outlier.

(a) Write down the coordinates of this point. (.....,.....)

(1)

(b) For all the other points write down the type of correlation.

.....

(1)

On the same day, in another American city, the maximum temperature was 18.6 °C.

(c) Estimate the number of hours of sunshine in this city on this day.

..... hours

(1)

Joan says,

“Temperatures are lower on days when there is less sunshine.”

(d) Does the scatter graph support what Joan says? Give a reason for your answer.

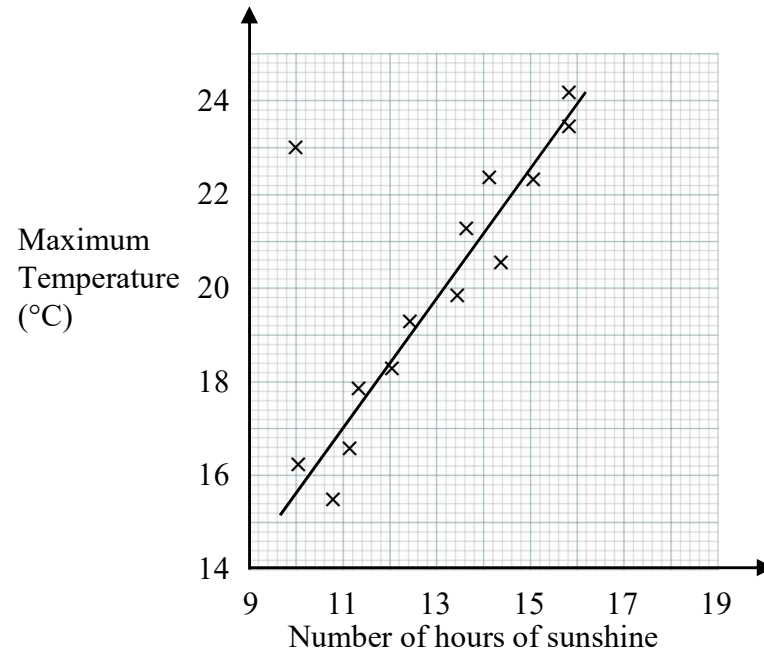
.....

(1)

(Total for Question 1 is 5 marks)



1 The scatter graph shows the maximum temperature and the number of hours of sunshine in fourteen American cities in one day.



One of the points is an outlier.

(a) Write down the coordinates of this point. (.....,.....)

(1)

(b) For all the other points write down the type of correlation.

.....

(1)

On the same day, in another American city, the maximum temperature was 18.6 °C.

(c) Estimate the number of hours of sunshine in this city on this day.

..... hours

(1)

Joan says,

“Temperatures are lower on days when there is less sunshine.”

(d) Does the scatter graph support what Joan says? Give a reason for your answer.

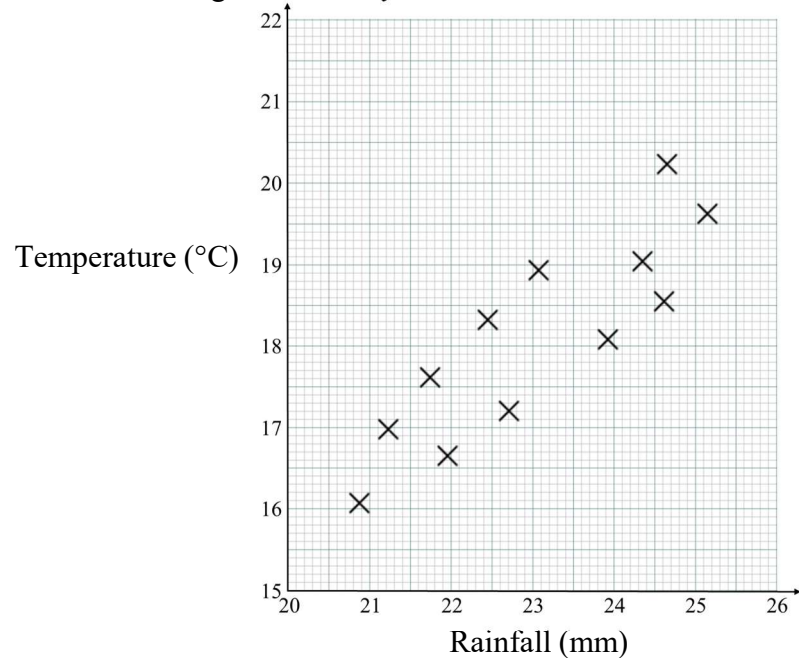
.....

(1)

(Total for Question 1 is 5 marks)



1 The scatter diagram shows information about rainfall and temperature on 12 days. It shows the age of each boy and the best time she takes to run 100 metres.



(a) Write down the type of correlation

.....
.....
(1)

On another day it is 21 °C.
The total rainfall that day is 22 mm.

The point representing this information would be an outlier on the scatter diagram.

(b) Explain why.

.....
.....

On a different day the rainfall is 26 mm. (1)
Jerry says “The scatter diagram shows it should be more than 21°C on that day.”

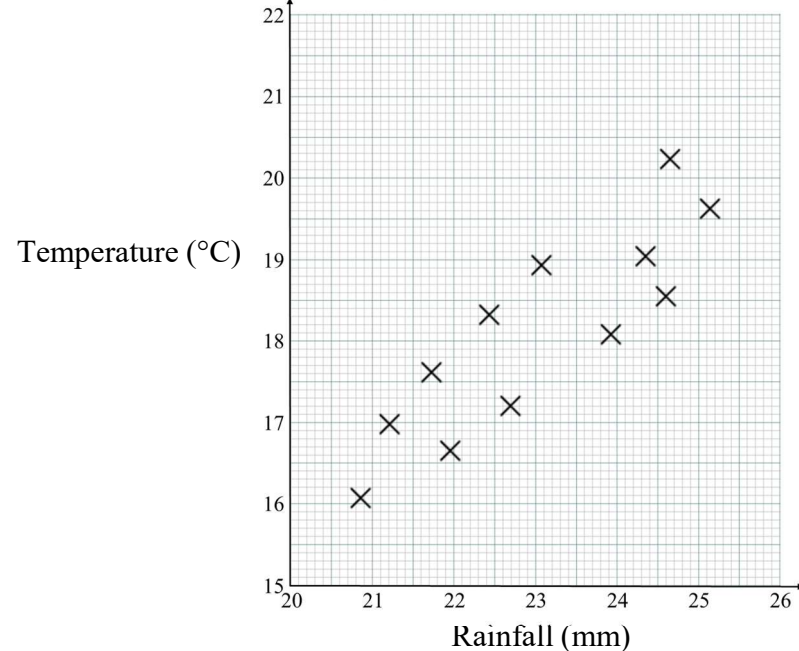
(c) Comment on what Jerry says.

.....
.....

(1)
(Total for Question 1 is 3 marks)



1 The scatter diagram shows information about rainfall and temperature on 12 days. It shows the age of each boy and the best time she takes to run 100 metres.



(a) Write down the type of correlation

.....
.....
(1)

On another day it is 21 °C.
The total rainfall that day is 22 mm.

The point representing this information would be an outlier on the scatter diagram.

(b) Explain why.

.....
.....

On a different day the rainfall is 26 mm. (1)
Jerry says “The scatter diagram shows it should be more than 21°C on that day.”

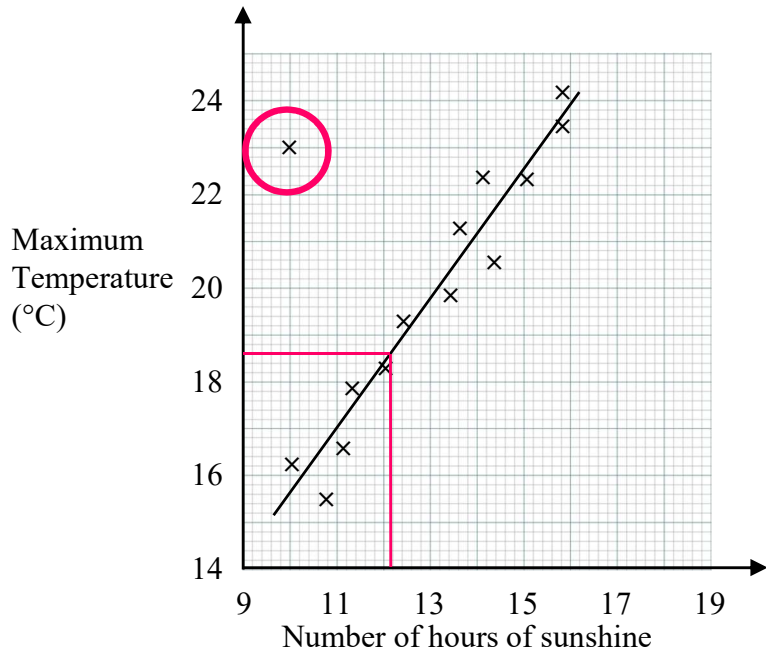
(c) Comment on what Jerry says.

.....
.....

(1)
(Total for Question 1 is 3 marks)



1 The scatter graph shows the maximum temperature and the number of hours of sunshine in fourteen American cities in one day.



One of the points is an outlier.

(a) Write down the coordinates of this point. (10 , 23)

(1)

(b) For all the other points write down the type of correlation. positive

(1)

On the same day, in another American city, the maximum temperature was 18.6 °C.

(c) Estimate the number of hours of sunshine in this city on this day. 12.2 hours

(1)

Joan says,

“Temperatures are lower on days when there is less sunshine.”

(d) Does the scatter graph support what Joan says? Give a reason for your answer.

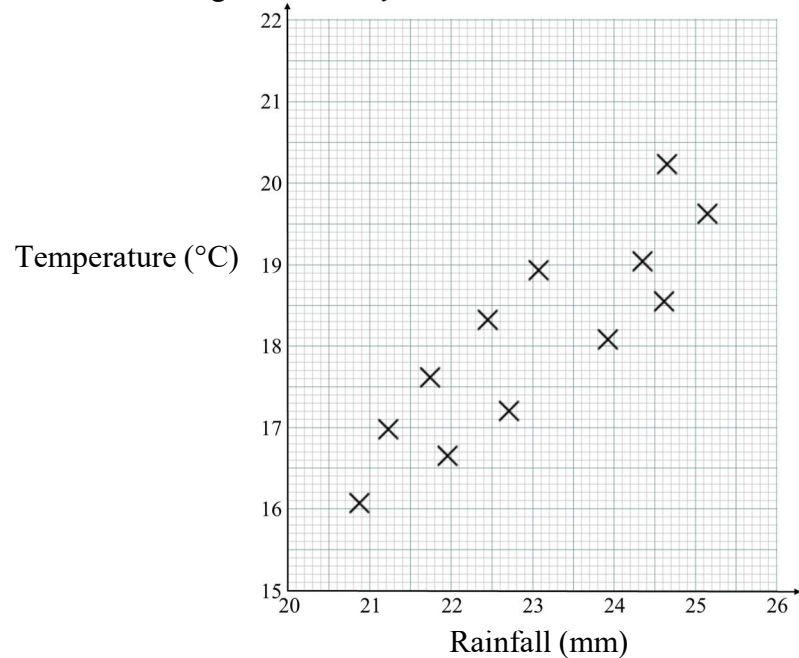
Yes, the majority of days with a lower temperature have less sunshine.

(1)

(Total for Question 1 is 5 marks)



- 1 The scatter diagram shows information about rainfall and temperature on 12 days. It shows the age of each boy and the best time she takes to run 100 metres.



- (a) Write down the type of correlation

positive

(1)

On another day it is 21 °C.
The total rainfall that day is 22 mm.

The point representing this information would be an outlier on the scatter diagram.

- (b) Explain why.

It does not fit with the correlation.

On a different day the rainfall is 26 mm. (1)

Jerry says “The scatter diagram shows it should be more than 21°C on that day.”

- (c) Comment on what Jerry says.

The point would be outside the range of the scatter diagram

(1)

(Total for Question 1 is 3 marks)