

Centre No.						Paper Reference						Surname	Initial(s)	
Candidate No.						1	3	8	0	/	4	H	Signature	

Paper Reference(s)

**1380/4H**

**Edexcel GCSE**

**Mathematics (Linear) – 1380**

Paper 4 (Calculator)

**Scattergraphs**

Past Paper Questions

Arranged by Topic

Examiner's use only

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Team Leader's use only

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**Materials required for examination**

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.

**Items included with question papers**

Nil

**Instructions to Candidates**

In the boxes above, write your centre number, candidate number, your surname, initials and signature.

Check that you have the correct question paper.

Answer ALL the questions. Write your answers in the spaces provided in this question paper.

**You must NOT write on the formulae page.**

**Anything you write on the formulae page will gain NO credit.**

If you need more space to complete your answer to any question, use additional answer sheets.

**Information for Candidates**

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2).

There are 26 questions in this question paper. The total mark for this paper is 100.

There are 24 pages in this question paper. Any blank pages are indicated.

**Calculators may be used.**

If your calculator does not have a  $\pi$  button, take the value of  $\pi$  to be 3.142 unless the question instructs otherwise.

**Advice to Candidates**

Show all stages in any calculations.

Work steadily through the paper. Do not spend too long on one question.

If you cannot answer a question, leave it and attempt the next one.

Return at the end to those you have left out.

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<http://bland.in>

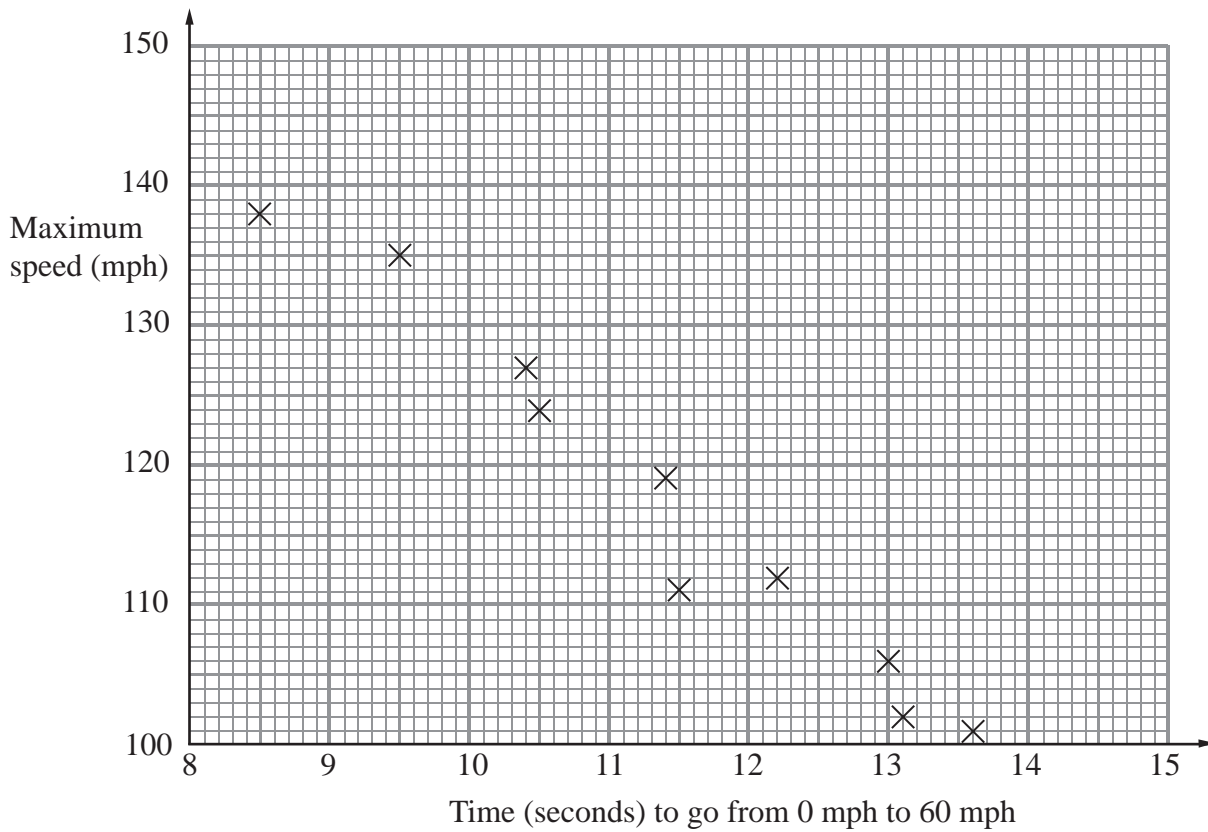
Compiled by Peter Bland



*Turn over*

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1. The scatter graph shows some information about 10 cars.  
 It shows the time, in seconds, it takes each car to go from 0 mph to 60 mph.  
 For each car, it also shows the maximum speed, in mph.



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

.....  
 (1)

The time a car takes to go from 0 mph to 60 mph is 11 seconds.

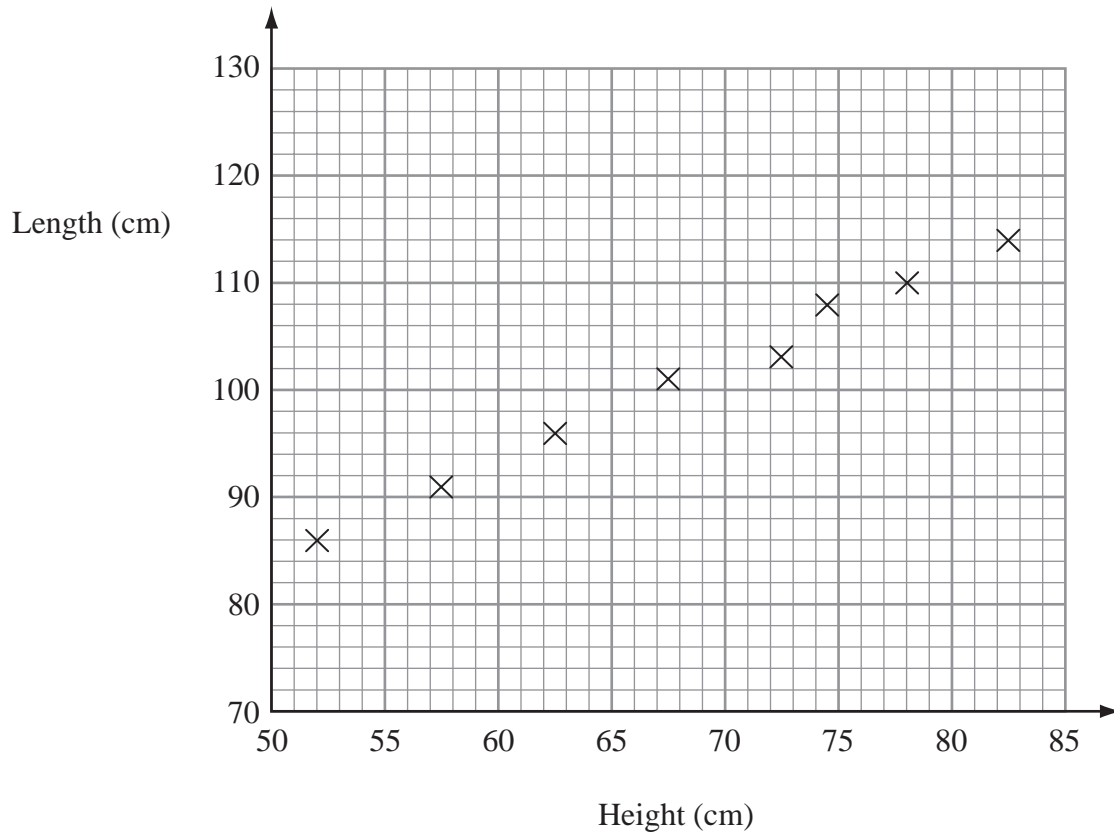
- (b) Estimate the maximum speed for this car.

..... mph  
 (2)

**(Total 3 marks)**

Q1

2. The scatter graph shows information about eight sheep. It shows the height and the length of each sheep.



The table gives the height and the length of two more sheep.

Height (cm)	65	80
Length (cm)	100	110

- (a) On the scatter graph, plot the information from the table. (1)

- (b) Describe the relationship between the height and the length of these sheep.  
 ..... (1)

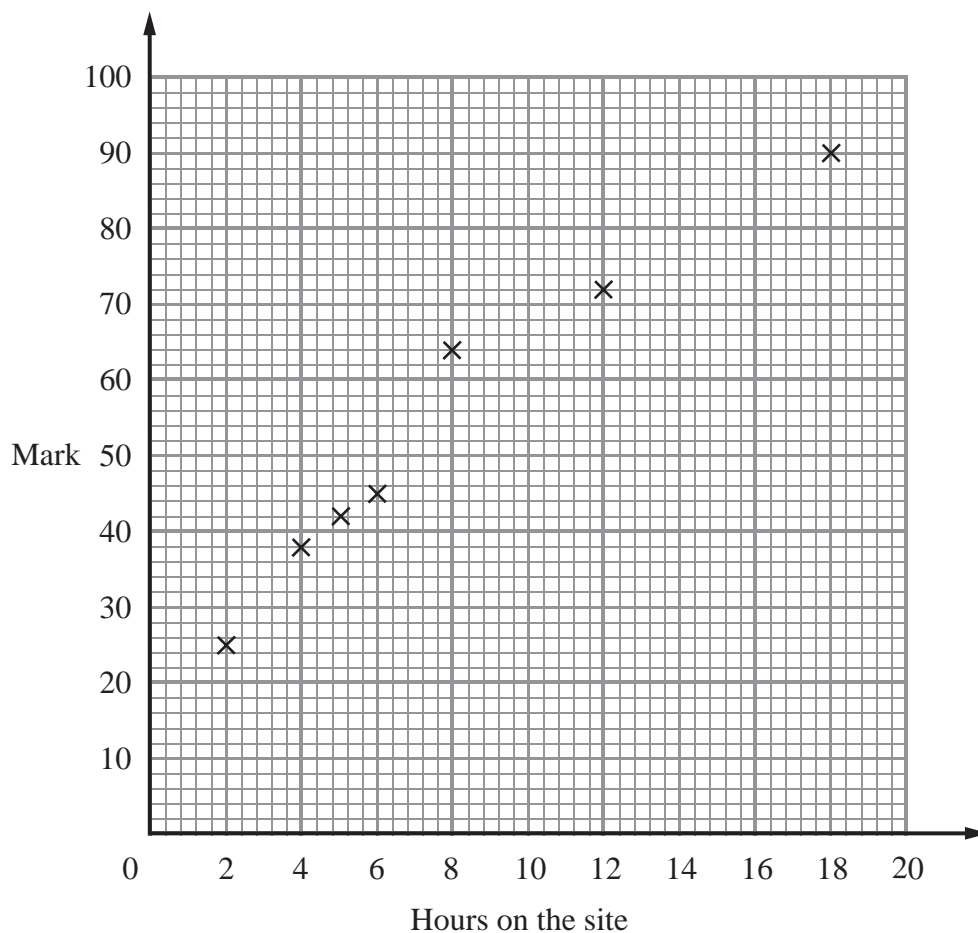
The height of a sheep is 76 cm.

- (c) Estimate the length of this sheep.  
 .....cm (2)

**(Total 4 marks)**

**Q2**

3. Some students revised for a mathematics exam. They used an internet revision site. The scatter graph shows the times seven students spent on the internet revision site and the marks the students got in the mathematics exam.

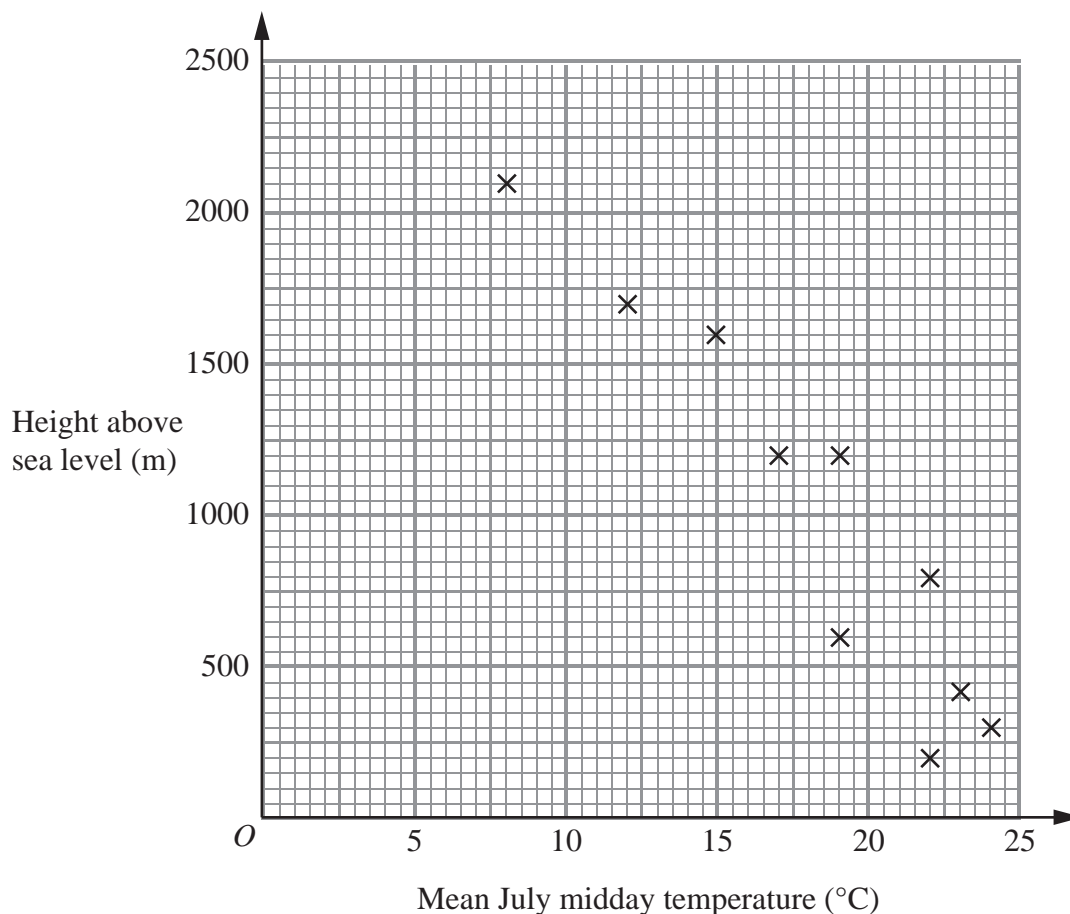


Here is the information for 3 more students.

Hours on the site	7	10	16
Mark	50	56	78

- (a) Plot this information on the scatter graph. (1)
- (b) What type of correlation does this scatter graph show?  
..... (1)
- (c) Draw a line of best fit on the scatter graph.

4. The scatter graph shows information for some weather stations. It shows the height of each weather station above sea level (m) and the mean July midday temperature ( $^{\circ}\text{C}$ ) for that weather station.



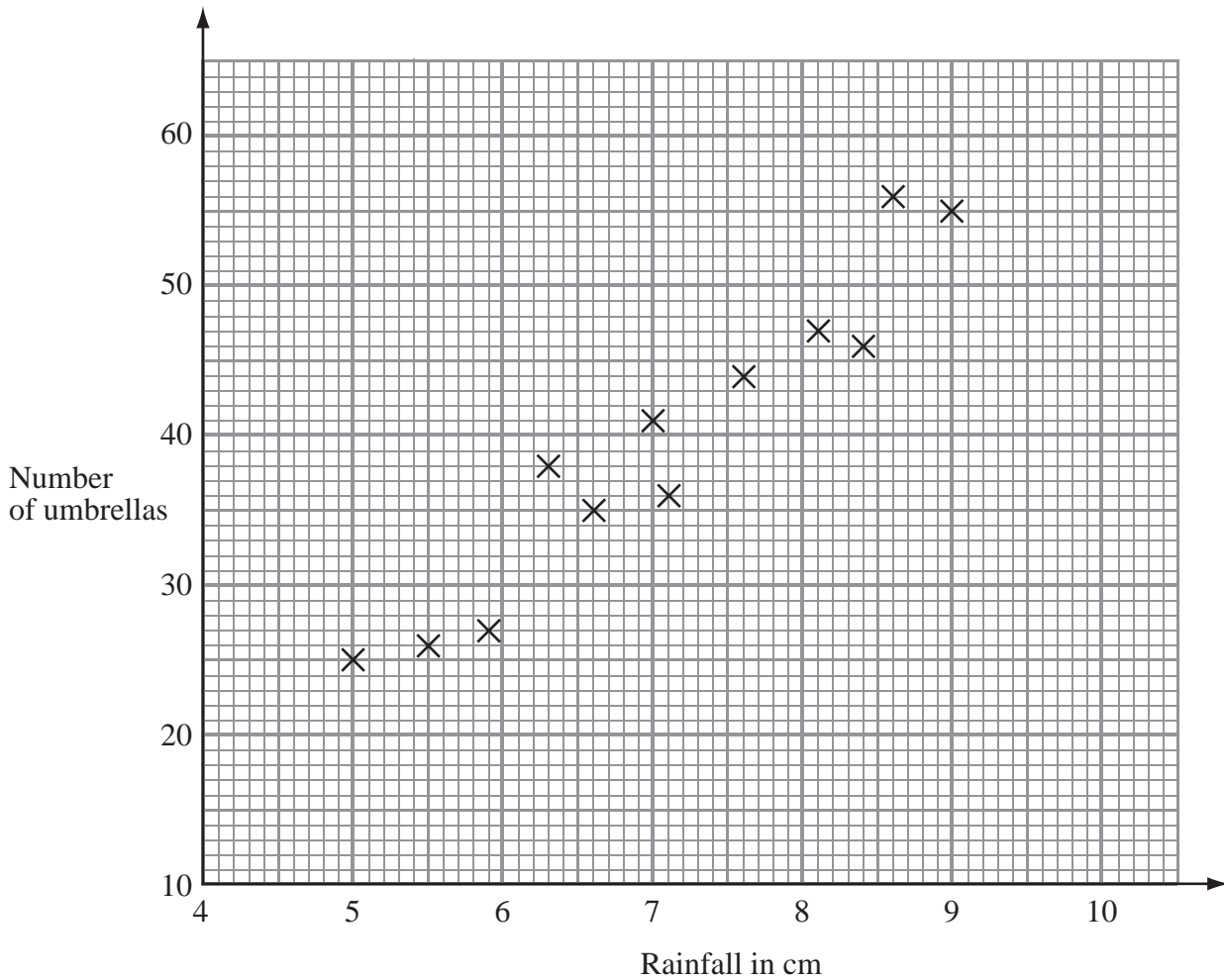
The table shows this information for two more weather stations.

Height of weather station above sea level (m)	1000	500
Mean July midday temperature ( $^{\circ}\text{C}$ )	20	22

- (a) Plot this information on the scatter graph. (1)
- (b) What type of correlation does this scatter graph show?  
 ..... (1)
- (c) Draw a line of best fit on the scatter graph. (1)

5. Mr Wither sells umbrellas.

The scatter graph shows some information about the number of umbrellas he sold and the rainfall, in cm, each month last year.



In January of this year, the rainfall was 6.1 cm.  
During January, Mr Wither sold 32 umbrellas.

(a) Show this information on the scatter graph.

(1)

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

..... (1)

In February of this year, Mr Wither sold 40 umbrellas.

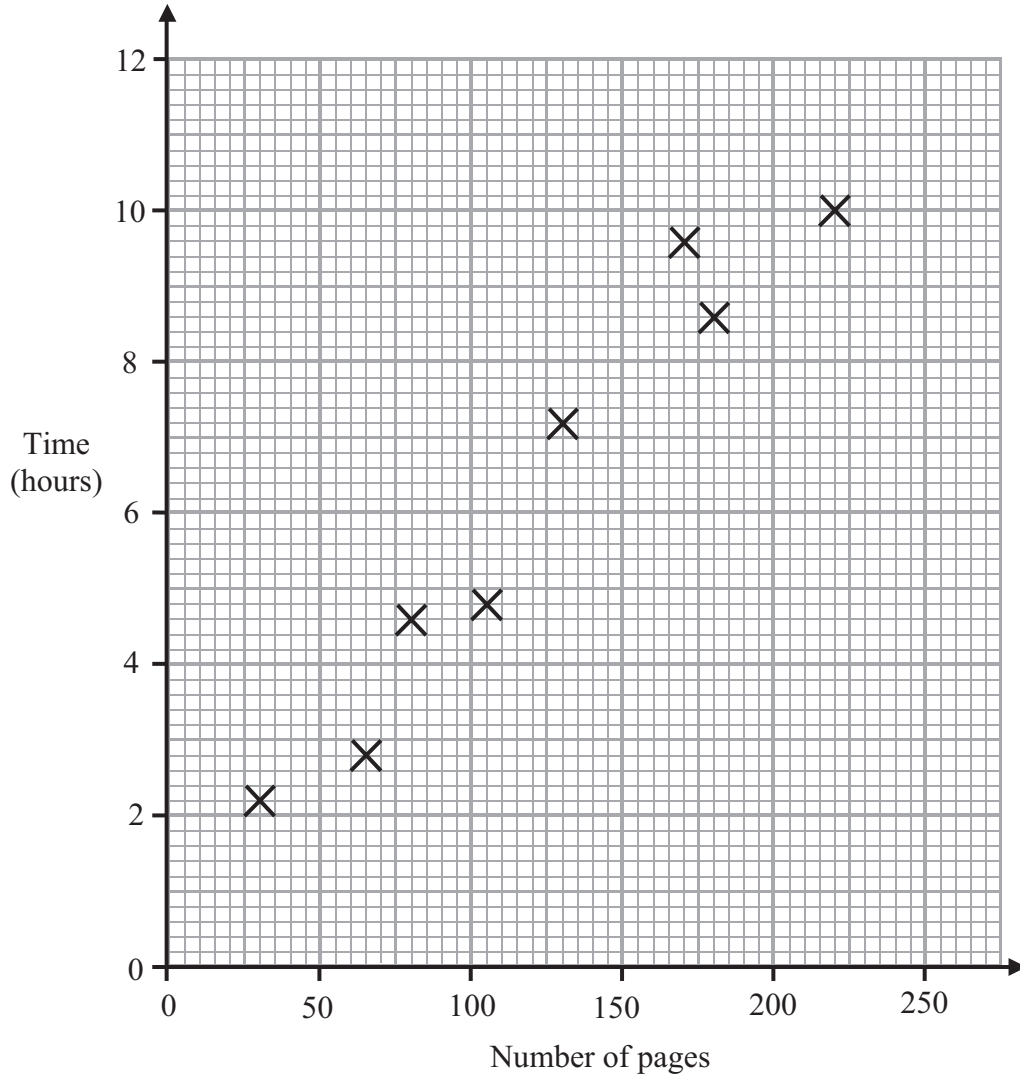
(c) Estimate the rainfall for February.

..... cm (2)

6. 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)

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