

NAME

Time:

Non-Calculator Questions



1 The table shows the marks gained by 20 children in a spelling test.

Mark	Frequency
6	7
7	5
8	2
9	1
10	5

- a Which mark was the mode? (1 mark)
- b Find the median mark. (1 mark)
- c Find the range of the marks. (2 marks)
- d Work out the mean mark for the 20 children. (3 marks)



3 The back-to-back stem and leaf diagram shows the distribution of ages of the male and female members of a bridge club.

	Male		Female
2	1 2		7 8 9
3	5 5 6		5 5 6 7
4	6 7 8		2 3 6
5	2 5 6 6 7		4 5 5 5 9
6	2 3 8 9		0 5

Key: 4 | 6 means 46 years

3a Find the median age for the male members of the bridge club.

(1 mark)

3b Find the median age for the female members of the bridge club.

(1 mark)

3c Use the median ages to compare the ages of the male and female bridge club members.

(1 mark)

3d Find the modal age for the female members of the bridge club.

(1 mark)

3e Lucinda says that the range of the female ages is greater than the range for the male ages.

Is Lucinda correct?

You must show how you get your answer.

(2 marks)



5 A pie chart is drawn to represent the eye colour of 120 students in a year group.
50 of the children have brown eyes.

a Work out the angle that would represent the number of children with brown eyes.

(2 marks)

Andy says the angle for children with blue eyes is 32°

b Explain why Andy cannot be correct.

(1 mark)

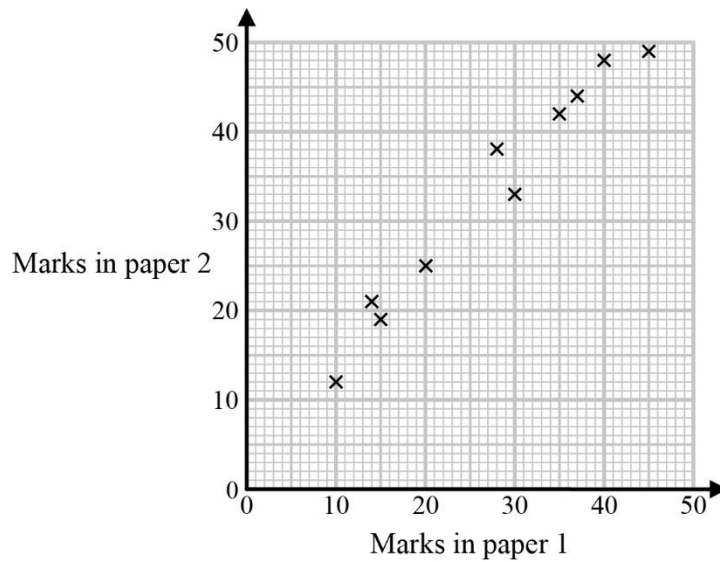


- 7 Four parcels had a mean weight of 400g.
When a fifth parcel was added the mean became 500g.
What was the weight of the fifth parcel?

(3 marks)



- 9 The scatter diagram shows information about the marks of 10 students on paper 1 and paper 2 in an English test.



9a Here are two more results. Plot them on the scatter graph.

(1 mark)

Mark in paper 1	38	25
Mark in paper 2	41	28

9b What type of correlation does the scatter graph show?

(1 mark)

A student was absent for paper 1 but gained 40 marks on paper 2

9c Use the graph to estimate the mark the student could have gained on paper 1

(2 marks)

Abdul did his test later and told his friends he got 38 marks on paper 1 and 25 marks on paper 2.

9d Do you think that Abdul remembered his marks correctly?

You must give a reason for your answer.

(1 mark)



11 The table shows information about the distribution of weekly wages, in £, for the 20 people who work for a company.

Wage (£ w)	Frequency
$0 \leq w < 200$	5
$200 \leq w < 400$	6
$400 \leq w < 600$	1
$600 \leq w < 800$	7
$800 \leq w < 1000$	1

a Find the modal class interval.

(1 mark)

b Find the class interval that contains the median.

(2 marks)

c Work out an estimate for the mean wage of the 20 employees.

(3 marks)

Overall mark	/
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