

GCSE QUESTIONS

Q1. NON-CALCULATOR

Jake and Sarah each played a computer game six times.

Their scores for each game are shown below.

Jake	10	9	8	11	12	8
Sarah	2	10	7	14	4	10

(a) Who had the most consistent scores, Jake or Sarah? You must give a reason for your answer.

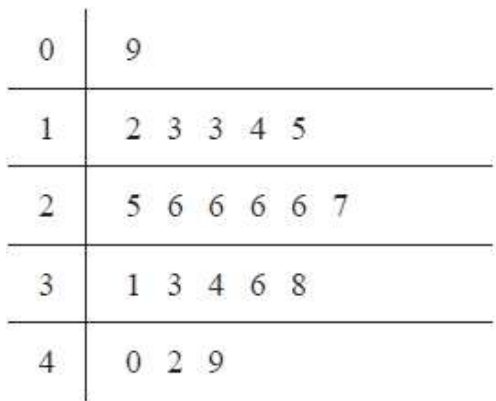
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.....

(1)

Jake played a different game 20 times.

The stem and leaf diagram shows information about his scores.



Key
1 | 2 represents 12 points

Jake said his modal score was 6 points because 6 occurs most often in the diagram.

(b) Is Jake correct? You must explain your answer.

.....

.....

(1)

(Total for question = 2 marks)

Q2. NON-CALCULATOR

The stem and leaf diagram shows information about the heights, in cm, of the boys in a class.

14	0	2	9			
15	1	1	3	5	7	
16	2	4	5	7	8	9
17	6	6	7	9		
18	0	0	1			

Key: 15 | 1 represents 151 cm

(a) Find the median height.

..... cm
(1)

The girls in the class have a median height of 162 cm. Their heights have a range of 45 cm.

(b) Compare the distribution of the heights of the boys with the distribution of the heights of the girls.

.....
.....
.....

(2)
(Total for question = 3 marks)

Q3. NON-CALCULATOR

Here are the ages, in years, of 20 footballers.

- 17 32 25 41 23 26 29 29 32 30
21 17 40 35 34 28 32 19 27 31

Wayne drew this stem and leaf diagram to show this information.

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

Key: 1 | 7 represents 17 footballers

Write down two things that are wrong with the stem and leaf diagram.

- 1
2

(Total for question = 2 marks)

Q6. CALCULATOR ALLOWED

Here are the speeds, in kilometres per hour, of 15 cyclists.

16	22	34	18	24
22	33	28	19	41
23	25	31	40	23

Show this information in a stem and leaf diagram.

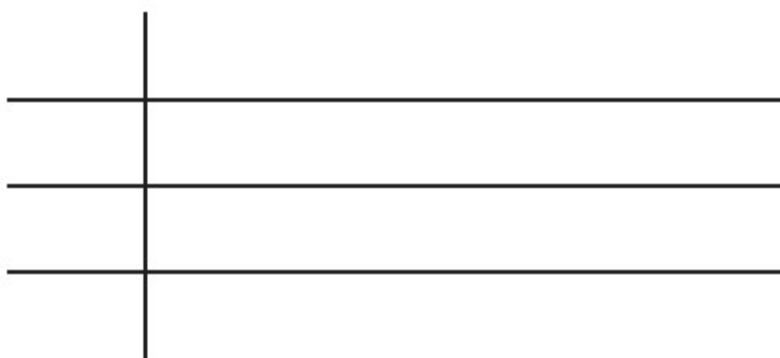
(Total for question = 3 marks)

Q7. CALCULATOR ALLOWED

Here are the heights, in centimetres, of 15 children.

123	147	135	150	147
129	148	149	125	137
133	138	133	130	151

(a) Show this information in a stem and leaf diagram.



(3)

One of the children is chosen at random.

(b) What is the probability that this child has a height greater than 140 cm?

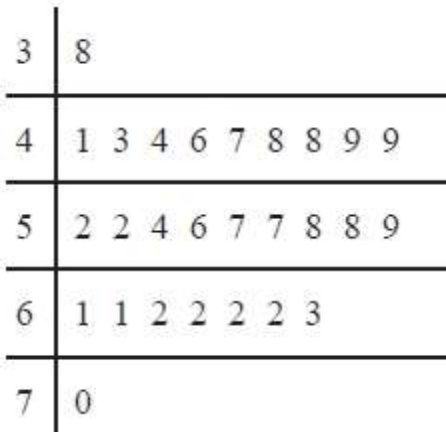
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(2)

(Total for question is 5 marks)

Q8. CALCULATOR ALLOWED

The stem and leaf diagram gives information about the speeds of 27 cars.



Key:
3 | 8 means 38 miles per hour

(a) Find the median speed.

..... miles per hour
(1)

(b) Work out the range.

..... miles per hour
(1)

One of the cars is chosen at random.

Jack says,

"The probability that the speed of this car is more than 60 miles per hour is $\frac{1}{3}$ "

(c) Jack is wrong.
Explain why.

.....
.....

(2)
(Total for question = 4 marks)

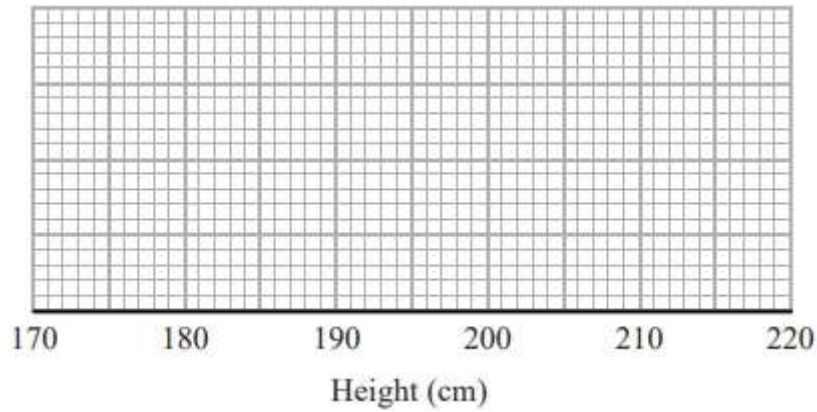
Q9. CALCULATOR ALLOWED

The stem and leaf diagram shows information about the heights, in cm, of 23 sunflowers.

17	3	4	9				
18	6	8	8				
19	0	0	1	4	6	7	8
20	1	4	7	7	9	9	
21	4	8	8	9			

Key: 17|3 represents 173 cm

On the grid, draw a box plot for this information.



(Total for question = 3 marks)