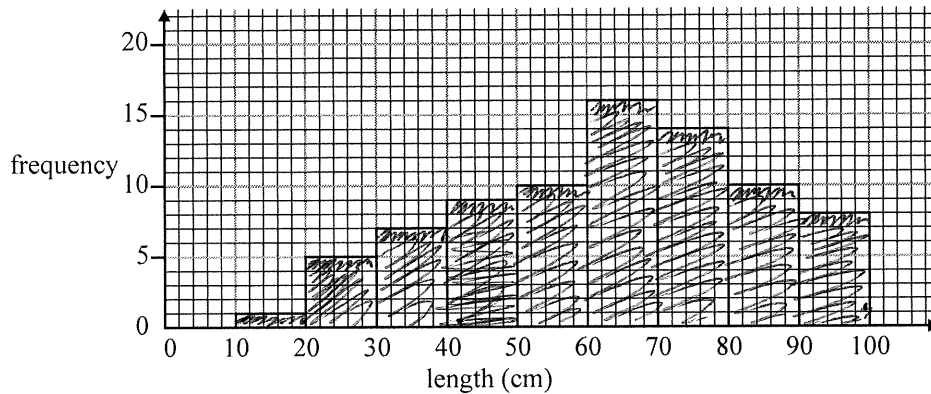


NAME

Descriptive Stats Worksheet

58 min
63 marks

1. The following diagram represents the lengths, in cm, of 80 plants grown in a laboratory.



- (a) How many plants have lengths in cm between
- (i) 50 and 60?
 - (ii) 70 and 90?
- (2)
- (b) Calculate estimates for the mean and the standard deviation of the lengths of the plants.
- (4)
- (c) Explain what feature of the diagram suggests that the median is different from the mean.
- (1)
- (d) The following is an extract from the cumulative frequency table.

length in cm less than	cumulative frequency
.	.
50	22
60	32
70	48
80	62
.	.

Use the information in the table to estimate the median. Give your answer to **two** significant figures.

(3)
(Total 10 marks)

2. At a conference of 100 mathematicians there are 72 men and 28 women. The men have a mean height of 1.79 m and the women have a mean height of 1.62 m. Find the mean height of the 100 mathematicians.

Working:

Answer:

.....

(Total 4 marks)

3. From January to September, the mean number of car accidents per month was 630. From October to December, the mean was 810 accidents per month.

What was the mean number of car accidents per month for the whole year?

Working:

Answer:

.....

(Total 6 marks)

7. A box contains 100 cards. Each card has a number between one and six written on it. The following table shows the frequencies for each number.

Number	1	2	3	4	5	6
Frequency	26	10	20	k	29	11

- (a) Calculate the value of k .

(2)

- (b) Find

- (i) the median;
(ii) the interquartile range.

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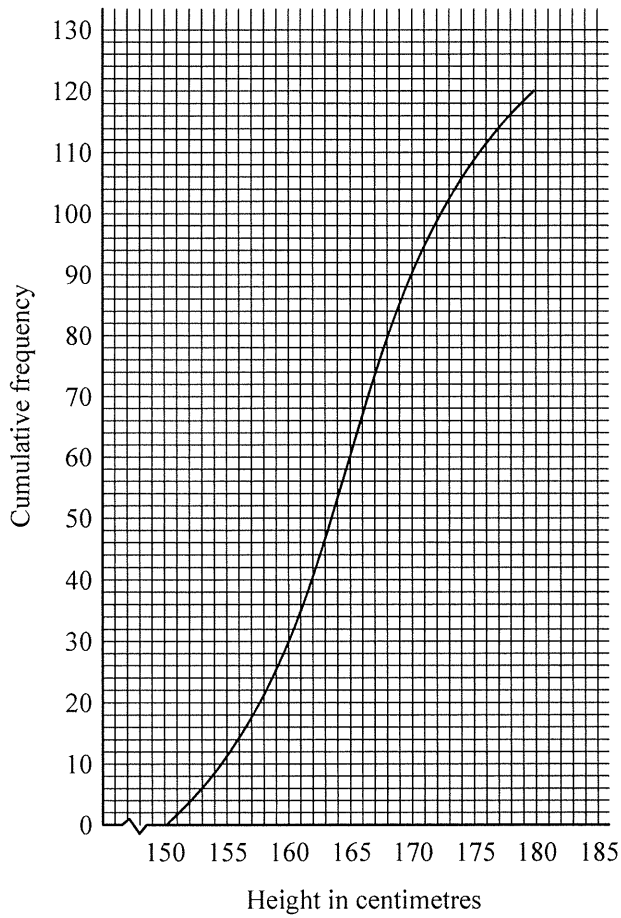
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(5)
(Total 7 marks)

10. The cumulative frequency graph below shows the heights of 120 girls in a school.



- (a) Using the graph
- (i) write down the median;
 - (ii) find the interquartile range.
- (b) Given that 60% of the girls are taller than a cm, find the value of a .

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(Total 6 marks)