

STATISTICS (Q 7, PAPER 2)

1996

7 (a) The numbers 3, 5, 6, x , 9, 2 have a mean of 6.
Find x .

(b) The cumulative frequency table below shows the number of minutes taken by 80 people to complete a crossword:

Minutes	≤ 10	≤ 20	≤ 30	≤ 40	≤ 50	≤ 60
Cumulative Frequency	3	13	39	59	73	80

Draw a cumulative frequency curve.

Use your curve to estimate

(i) the median time to complete the crossword

(ii) the interquartile range.

(c) The grouped frequency table below shows the minutes spent in a shopping complex by a number of people:

Minutes	5–15	15–25	25–35	35–65
Number of people	10	50	80	60

Note that 5–15 means that 5 is included but 15 is not, etc.

(i) Draw a histogram to illustrate the data.

(ii) Calculate the mean number of minutes spent per person in the shopping complex, taking 10, 20 etc. as mid-interval values.

ANSWERS

7 (a)