## Ex 19 Statistics

## Section A (Knowledge)

1 The number of people visiting a monument over a number of days was recorded on a frequency table.

| No. of people | Frequency | No. of people $\times$ frequency |
| :---: | :---: | :---: |
| 15 | 8 | 120 |
| 16 | 9 |  |
| 17 | 10 |  |
| 18 | 8 |  |
| 19 | 5 |  |
|  | 40 |  |

Copy and complete the table and calculate the mean.
2 A group of 20-year old girls were asked to list the number of boys they had dated since they turned 16.
The results of the survey are shown in the frequency table below.

| No. of boys dated | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of girls | 1 | 3 | 2 | 5 | 1 | 7 | 4 | 0 | 2 | 1 | 1 |

a) Write down the median number of boyfriends.
b) Write down the upper and lower quartiles.
c) Draw a neat boxplot to show the results of the survey.

3 There are 1 red, 2 blue and 3 green counters in a bag.
a) A counter is taken from the bag, what is the probability that the counter Is blue?
b) The counter is replaced in the bag and 2 yellow counters are added to the bag. A counter is taken from the bag. What is the probability that it is not green.

4 Fiona checks out the price of a litre of milk in several shops. The prices in pence are:-
$49 \quad 44$
41
52
47
43
Calculate the standard deviation

## Section C (Mixed)

5 The angle of elevation from the ground to the top of a block of flats is $46^{\circ}$. The angle is measured at a point 85 metres away from the flats as shown in the diagram below.


Calculate the height, h metres, of the block of flats, correct to 1 decimal place.

