

Averages from Frequency Tables

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **23**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

1 The table shows information about the number of children in 25 families.

Number of children	0	1	2	3	4
Frequency	4	7	9	3	2

(a) Write down the mode.

.....
(1)

(b) Find the median.

.....
(1)

(c) Work out the mean number of children per family.

.....
(3)

(Total for Question 1 is 5 marks)

- 2** A café asked 25 customers how many sugar cubes they took in their tea. The frequency table gives information about the results.

Number of sugar cubes	0	1	2	3
Frequency	6	8	7	4

- (a) Work out the mean number of sugar cubes per customer.

.....
(3)

- (b) Jon says,
 ‘The median is 1.5 because 1.5 is in the middle of 0, 1, 2 and 3’
 Is Jon correct?
 You must give a reason for your answer.

.....

 (1)

(Total for Question 2 is 4 marks)

- 3** 20 people each had some driving lessons one week.
The table shows information about the number of lessons they had.

Number of lessons	1	2	3	4	5
Frequency	6	5	4	3	2

Ali says the mean number of lessons is $\frac{1+2+3+4+5}{5} = 3$

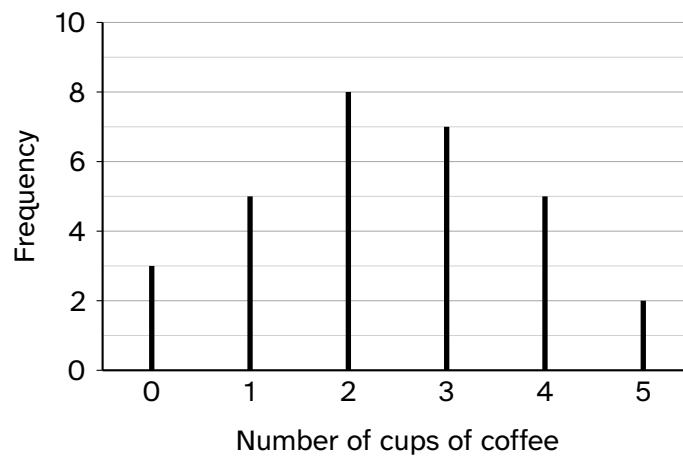
- (a) Explain what Ali has done wrong.

(1)

- (b) Work out the correct mean number of lessons.

.....
(2)
(Total for Question 3 is 3 marks)

- 4 30 office workers each recorded the number of cups of coffee they drank on Monday. The vertical line chart shows information about the results.



- (a) Find the median number of cups of coffee.

.....
(2)

- (b) Work out the mean number of cups of coffee.

.....
(3)
(Total for Question 4 is 5 marks)

- 5** The table shows the number of tickets bought by each customer at a cinema one evening.

Number of tickets	1	2	3	4
Frequency	12	x	9	4

There were 40 customers.

Work out the total number of tickets bought.

.....
(3)

(Total for Question 5 is 3 marks)

- 6** The table shows information about the number of goals a team scored in some football matches.

Goals	0	1	2	3
Frequency	3	y	3	4

The mean number of goals scored per match is 1.4

Work out the value of y .

$y =$
(3)

(Total for Question 6 is 3 marks)
