

Frequency Tables

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

Name _____

Total marks: **21**

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

- 1** A shop sold 24 pairs of school shoes on Saturday.
Here are the shoe sizes.

6 5 7 6 8 4 6 7 5 6 7 6
5 8 6 7 4 6 5 7 6 8 5 7

- (a) Complete the frequency table.

Shoe size	Tally	Frequency
4		
5		
6		
7		
8		

(2)

- (b) Write down the shoe size that is the mode.

.....
(1)

(Total for Question 1 is 3 marks)

- 2 Jamal asked some students how many pets they have.
He made this table.

Number of pets	Tally	Frequency
0		8
1		11
2		6
3		3
Total		30

- (a) Write down one thing that is wrong with the table.

(1)

- (b) How many of the students have at least 2 pets?

.....
(1)
(Total for Question 2 is 2 marks)

- 3** Some people were asked to name their favourite pet.
The tally chart shows the results.

Pet	Tally	Frequency
Dog	I	
Cat		
Fish	II	
Rabbit		

- (a) Complete the frequency column in the table.

(1)

- (b) How many people were asked?

.....
(1)

- (c) What fraction of the people chose cats?
Give your answer in its simplest form.

.....
(2)

(Total for Question 3 is 4 marks)

4 Here are the heights, in cm, of 16 students.

152 168 143 160 174 155 149 161
166 150 171 159 164 148 169 157

(a) Complete the grouped frequency table for the heights.

Height (h cm)	Tally	Frequency
$140 \leq h < 150$		
$150 \leq h < 160$		
$160 \leq h < 170$		
$170 \leq h < 180$		

(2)

(b) Write down the modal class.

.....
(1)

(c) How many of the students are at least 160 cm tall?

.....
(1)

(Total for Question 4 is 4 marks)

- 5** The table gives information about the times, in minutes, that 40 customers spent in a café.

Time (t minutes)	Frequency
$0 < t \leq 10$	6
$10 < t \leq 20$	13
$20 < t \leq 30$	15
$30 < t \leq 40$	6

- (a) Write down the modal class.

.....
(1)

- (b) Find the class interval that contains the median.

.....
(1)

- (c) What fraction of the customers spent more than 20 minutes in the café?
Give your answer in its simplest form.

.....
(2)

(Total for Question 5 is 4 marks)

- 6** The table gives information about the number of books read last month by 40 students.

Number of books	0	1	2	3	4
Frequency	7	12	x	6	4

- (a) Work out the value of x .

$x = \dots\dots\dots$
(2)

- (b) Work out the total number of books read by the 40 students.

$\dots\dots\dots$
(2)

(Total for Question 6 is 4 marks)