

Mean, Median, Mode and Range

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

Name _____

Total marks: **24**

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

1 Here are the ages, in years, of nine people.

14 20 9 16 21 14 11 18 15

(a) Write down the mode.

.....
(1)

(b) Work out the range.

.....
(1)

(c) Find the median.

.....
(1)

(d) Work out the mean.
Give your answer correct to 1 decimal place.

.....
(2)

(Total for Question 1 is 5 marks)

2 Here are four numbers.

3 8 10 15

Sam says, 'The median is 10 because 10 is in the middle.'

Sam is wrong.

Explain why.

(1)

(Total for Question 2 is 1 mark)

3 Here are the lowest temperatures in a town on five days.

5 °C -2 °C 8 °C 3 °C -4 °C

Ines says,

'The range is $8 - 4 = 4$ °C'

Ines is wrong.

Explain why.

(1)

(Total for Question 3 is 1 mark)

4 The mean of four numbers is 12
Three of the numbers are 8, 15 and 10
Work out the fourth number.

.....

(2)

(Total for Question 4 is 2 marks)

- 5 Write down three whole numbers that have a mean of 7 and a range of 6

.....
(2)

(Total for Question 5 is 2 marks)

- 6 There are 3 people in a lift.
Their mean weight is 70 kg.
Two more people get into the lift. Their weights are 82 kg and 91 kg.
Work out the mean weight of the 5 people.

..... kg
(3)

(Total for Question 6 is 3 marks)

- 7** Bryn records the time of his journey to school on 5 days.
The mean time for the 5 days is 18 minutes.
The times, in minutes, for days 1 to 4 are

15 22 16 17

- (a) Work out the time of the journey on day 5

..... minutes
(2)

- (b) On day 6 the journey takes 36 minutes.
Work out the mean journey time for the 6 days.

..... minutes
(2)

(Total for Question 7 is 4 marks)

- 8** 12 students in team A took a quiz. Their mean score was 7.5
8 students in team B took the same quiz. Their mean score was 9
Anika says,

“The mean score of all 20 students is 8.25, because $(7.5 + 9) \div 2 = 8.25$ ”

Is Anika correct?
You must show how you get your answer.

(3)

(Total for Question 8 is 3 marks)

- 9 A box contains 20 apples.
The mean mass of the 20 apples is 150 g.
Jo takes one apple out of the box. This apple has a mass of 172 g.
She puts a different apple into the box.
The mean mass of the 20 apples in the box is now 148 g.
Work out the mass of the apple Jo put into the box.

..... g
(3)

(Total for Question 9 is 3 marks)
