Edexcel GCSE
Mathematics (Linear) – 1MA0

Mean, Median, Mode & Range

Materials required for examination
Ruler graduated in centimetres and
millimetres, protractor, compasses,
pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers
Nil

Instructions

Use black ink or ball-point pen.
Fill in the boxes at the top of this page with your name, centre number and candidate number.
Answer all questions.
Answer the questions in the spaces provided – there may be more space than you need.
Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to
spend on **each** question.
Questions labelled with an **asterisk** (*) are ones where the quality of your written communication
will be assessed – you should take particular care on these questions with your spelling, punctuation
and grammar, as well as the clarity of expression.

Advice

Read each question carefully before you start to answer it.
Keep an eye on the time.
Try to answer every question.
Check your answers if you have time at the end.

1. Chloe made a list of her homework marks.

    4   5   5   5   4   3   2   1   4   5

    (a) Write down the mode of her homework marks.

    ....5.............

    (1)

    (b) Work out her mean homework mark.

    ....3·8...........

    (2)
    (Total 3 marks)

2. Peter rolled a 6-sided dice ten times.
   Here are his scores.

    3   2   4   6   3   3   4   2   5   4

    (a) Work out the median of his scores.

    2, 2, 3, 3, 3, 4, 4, 4, 5, 6

    ....3·5.............

    (2)

    (b) Work out the mean of his scores.

    ....3·6...............

    (2)

    (c) Work out the range of his scores.

    ....4.............

    (1)
    (Total 5 marks)

3. Here are the weights, in kg, of 8 people.

    63   65   65   70   72   86   90   97

    (a) Write down the mode of the 8 weights.

                                                    65 kg
                                                                    (1)

    (b) Work out the range of the weights.

         97 - 63

                                                    34 kg
                                                                    (2)
                                                        (Total 3 marks)

4. Here are the ages of 6 people.

         5   18   10   14   22   12

    (a) Work out the range of these ages.

         22 - 5

                                            17
                                                                    (1)

    (b) Find the median age.

         5, 10, 12, 14, 18, 22

                                            13
                                                                    (2)

    (c) Work out the mean age.

         81 ÷ 6

                                            13·5
                                                                    (2)
                                                        (Total 5 marks)

5. Here are the shoe sizes of 6 students.

2   10   7   6   10   9

(a) Work out the range of these shoe sizes.

10 - 2 = 8

.... 8 ....

(1)

(b) Find the median shoe sizes.

2, 6, 7, 9, 10, 10

.... 8 ....

(2)

(c) Work out the mean shoe sizes.

44 ÷ 6

.... 7 ꜥꜣꜩ ....

(2)

(Total 5 marks)

6. Jalin wrote down the ages, in years, of seven of his relatives.

45,   38,   43,   43,   39,   40,   39

(a) Find the median age.

38, 39, 39, 40, 43, 43, 45

.... 40 ....

(1)

(b) Work out the range of the ages.

45 - 38 =

.... 7 ....

(1)

(c) Work out the mean age.

287 ÷ 7

.... 41 ....

(2)

(Total 4 marks)

7. Mr Smith kept a record of the number of absences for each student in his class for one term.

Here are his results.

0   0   0   8   4   5   5   3   2   1

(a) Write down the mode.

.............0...........

(1)

(b) Work out the mean.

$28 \div 10$

.........2.8...........

(2)

(Total 3 marks)

8. Here are 10 numbers.

3   2   5   4   2   4   6   2   1   2

(a) Find the mode of these numbers.

............2.............

(1)

(b) Find the median of these numbers.

1, 2, 2, 2, 2, 3, 4, 4, 5, 6

..........2.5...........

(2)

(c) Find the range of these numbers.

$6 - 1 = 5$

...........5...............

(2)

(Total 5 mark)

9. Here are the test marks of 6 girls and 4 boys.

Girls: 5   3   10   2   7   3

Boys: 2   5   9   3

(a) Write down the mode of the 10 marks.

.... 3 ....

(1)

(b) Work out the median mark of the **boys**.

2, 2, 3, 5, 9

.... 4 ....

(2)

(c) Work out the range of the **girls'** marks.

10 − 2 = 8

.... 8 ....

(1)

(d) Work out the mean mark of all 10 students.

49 ÷ 10

.... 4·9 ....

(2)

(Total 6 marks)

10. Here are ten numbers.

7   6   8   4   5   9   7   3   6   7

(a) Work out the range.

9 − 3 = 6

.... 6 ....

(2)

(b) Work out the mean.

62 ÷ 10

.... 6·2 ....

(2)

(Total 4 marks)

11. Here are fifteen numbers.

$$10 \quad 12 \quad 13 \quad 15 \quad 15$$
$$17 \quad 19 \quad 20 \quad 20 \quad 20$$
$$21 \quad 25 \quad 25 \quad 25 \quad 25$$

(a) Find the mode.

................25..................

(1)

(b) Find the median.

...........20..........

(1)

(c) Work out the range.

25-10

...........15..............

(2)

(Total 4 marks)

12. A rugby team played 7 games.

Here is the number of points they scored in each game.

$$3 \qquad 5 \qquad 8 \qquad 9 \qquad 12 \qquad 12 \qquad 16$$

(a) Find the median.

...........9.........

(2)

The rugby team played another game.
They scored 11 points.

(b) Find the median number of points scored in these 8 games.

...........10.........

(3)

(Total 5 marks)

13. Tom recorded the shoe size of five of his friends.
Here are his results.

8   9   3   4   7

(a) Work out the median shoe size.

3, 4, 7, 8, 9

...............7...............

(2)

Another friend has a shoe size of 8

(b) Work out the median shoe size of all **six** friends of Tom.

3, 4, 7, 8, 8, 9

...............7·5...............

(2)
(Total 4 marks)

14. The mean of eight numbers is 41
The mean of two of the numbers is 29

What is the mean of the other six numbers?

41 × 8 = 328
29 × 2 = 58

270

270 ÷ 6

...............45...............
(Total 3 marks)