

Averages and Range

ANSWERS

Calculator | 30 minutes | Total marks: 22

Name _____ Class _____

1

Here are five numbers.

4 7 2 7 5

(a) Write down the mode.

Answer 7 (1) [1 mark]

(b) Work out the range.

Answer 5 (1) [1 mark]

(c) Work out the median.

2, 4, 5, 7, 7 (1)

Answer 5 (1) [2 marks]

(d) Work out the mean.

25 ÷ 5 (1)

Answer 5 (1) [2 marks]

2

Here are four numbers.

3 8 5 10

Work out the median.

3, 5, 8, 10, halfway between 5 and 8 (1)

Answer 6.5 (1) [2 marks]

3

Write one word from the box next to each description.

mean

median

mode

range

the most common value

mode

the middle value when the numbers are in order

median

the biggest value take away the smallest value

range

add up the values and divide by how many there are

mean

All four correct scores 2 marks. Two or three correct scores 1 mark.

[2 marks]

4

The table shows the number of goals scored in each of 20 football matches.

Goals	Frequency	Goals × frequency
0	4	0
1	6	6
2	7	14
3	3	9 (1)
Total	20	29 (1)

(a) Write down the mode.

Answer 2 (1)

[1 mark]

(b) Complete the table.

[2 marks]

(c) Work out the mean number of goals.

$$29 \div 20 (1)$$

Answer 1.45 (1)

[2 marks]

5

Amy and Ben each play a game six times.

Amy's scores have a mean of 6 and a range of 2

Ben's scores have a mean of 6 and a range of 7

Whose scores are more consistent?

Give a reason for your answer.

Amy (1)

Her range is smaller (1)

[2 marks]

6

(a) The mean of four numbers is 5

Work out the total of the four numbers.

Answer 20 (1)

[1 mark]

(b) Three of the four numbers are 3, 6 and 4

Work out the fourth number.

Answer 7 (1)

[1 mark]

7

The temperatures on four days are 12 °C, 15 °C, 9 °C and 18 °C.

Work out the range of the temperatures.

Answer 9 (1)

°C

[1 mark]

8

The mean of the numbers 3, 5, 8 and x is 6

Work out the value of x .

$$4 \times 6 = 24, \text{ and } 3 + 5 + 8 = 16 \text{ (1)}$$

$$x = 8 \text{ (1)}$$

[2 marks]

Question	Topic	RAG
1	I can find the mode, range, median and mean of a list	
2	I can find the median of an even number of values	
3	I know what each average means	
4	I can find the mode and mean from a frequency table	
5	I can compare two sets of data	
6	I can use the mean to find a total and a missing value	
7	I can find a range in context	
8	I can find a missing value from a mean	