

Averages and Range

ANSWERS

1

Find the mean, median, mode and range.

7 3 9 4 7 2 10

In order

2 3 4 7 7 9 10

Mean $42 \div 7 = 6$
Median 7
Mode 7
Range $10 - 2 = 8$

2

Find the mean, median, mode and range.

5 8 2 8 6 4 9

In order

2 4 5 6 8 8 9

Mean $42 \div 7 = 6$
Median 6
Mode 8
Range $9 - 2 = 7$

3

Find the mean, median, mode and range.

12 15 11 15 17 10 18

In order

10 11 12 15 15 17 18

Mean $98 \div 7 = 14$
Median 15
Mode 15
Range $18 - 10 = 8$

4

Find the mean, median, mode and range.

3 9 6 3 10 7 4

In order

3 3 4 6 7 9 10

Mean $42 \div 7 = 6$
Median 6
Mode 3
Range $10 - 3 = 7$

5

Find the mean, median, mode and range.

21 18 25 18 30 22 27

In order

18 18 21 22 25 27 30

Mean $161 \div 7 = 23$
Median 22
Mode 18
Range $30 - 18 = 12$

6

Find the mean, median, mode and range.

4 7 1 9 7 3 8

5 10

In order

1 3 4 5 7 7 8

9 10

Mean $54 \div 9 = 6$
Median 7
Mode 7
Range $10 - 1 = 9$

7

Five numbers have a mean of 6.

Four of the numbers are 3, 5, 8 and 9.

Find the fifth number.

$\text{the total is } 30, \text{ and } 3 + 5 + 8 + 9 = 25$

Answer 5

8

The numbers 4, 7, 7, 10 and x have a

range of 9. x is the largest number.

Find x .

$4 + 9$

Answer $x = 13$

Averages and Range further practice

ANSWERS

9

Rosa's netball team scored these numbers of goals in 9 matches. Find the mean, median, mode and range.

14, 9, 17, 12, 9, 15, 20, 9, 12

Mean $117 \div 9 = 13$
Median 12
Mode 9
Range $20 - 9 = 11$

10

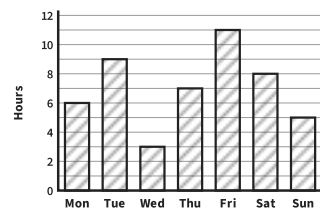
The heights of 8 sunflowers, in cm. Find the median and the range.

142, 128, 155, 136, 149, 131, 160, 138

Median $\text{halfway between } 138 \text{ and } 142$
Range $160 - 128 = 32 \text{ cm}$

11

The bar chart shows the hours of sunshine each day for a week. Find the mean and the range.



Mean $49 \div 7 = 7 \text{ hours}$
Range $11 - 3 = 8 \text{ hours}$

12

These six numbers are in order. Their median is 10. Find x .

3, 7, x , 12, 15, 20

$10 \text{ is halfway between } x \text{ and } 12$
Answer $x = 8$

13

Two archers each shot 5 arrows. Work out the mean and the range for each archer. Which archer is more consistent?

Archer A: 7, 9, 8, 6, 10

Archer B: 10, 3, 9, 10, 8

	Mean	Range
A	8	4
B	8	7

$\text{the means are the same, A has the smaller range}$
Answer Archer A

14

The mean mass of 4 pumpkins is 6 kg. A fifth pumpkin is added and the mean mass becomes 7 kg. Find the mass of the fifth pumpkin.

$4 \times 6 = 24 \text{ and } 5 \times 7 = 35$
Answer 11 kg

15

Three whole numbers have a median of 7, a mean of 8 and a range of 9. Find the three numbers.

$\text{they add up to } 24, \text{ and the biggest is } 9 \text{ more than the smallest}$
Answer $4, 7, 13$

16

Ella adds 10 to every number in a list. She says the range goes up by 10. Is she right? Explain.

$\text{the largest and smallest both go up by } 10, \text{ so the range stays the same}$
Answer No