

1. Here are 6 numbers:

3, 5, 7, 2, 4, 9

a) Work out the mean.

b) Work out the range.

3 marks

2. Here are 7 numbers

8, 6, 7, 5, 5, 9, 4

a) Find the median.

b) Work out the range.

2 marks

3. The ages of 8 children are

6, 7, 6, 8, 6, 9, 10, 6

a) Find the mode.

b) Work out the mean.

3 marks

4. The shoe sizes of 10 people are

5, 6, 7, 8, 6, 5, 6, 7, 5, 6

a) Find the median.

b) Find the mode.

2 marks

5. Here are 9 test scores

56, 67, 55, 89, 90, 75, 70, 71, 84

a) Find the mean score.

b) Find the range of the scores.

3 marks

6. A class records the number of pets owned

0, 1, 2, 2, 3, 2, 4, 2, 1, 2

a) Find the mode.

b) Find the median.

2 marks

7. Here are the number of books read by 12 students

3, 4, 5, 6, 7, 5, 4, 6, 8, 5, 7, 6

a) Work out the mean.

b) Work out the range.

3 marks

8. The weights of 10 apples (in grams) are

150, 152, 149, 153, 151, 150, 152, 148, 150, 154

a) Find the mode.

b) Work out the mean weight.

3 marks

9. Kieran is given the list of numbers:

4, 7, 8, 6, 10, 2, 8

Kieren is asked to work out the median, he says:

"The middle number is 6, so the median is 6"

Kieren is wrong, explain what Kieran has done wrong.

Kieran is also asked to work out the range, here is his working:

$$\text{Range} = 8 - 4 = 4$$

This is wrong, explain why.

2 marks

10. Here are the times (in seconds) taken by 9 students to complete a puzzle:

11.2, 11.8, 13.2, 12.0, 11.6, 12.8, 13.0, 11.9, 12.3

a) Work out the mean time.

b) Find the median time.

c) Work out the range of the times.

4 marks

11. The following are the distances (in km) run by 7 athletes during training:

4.6, 5.2, 4.8, 5.0, 5.1, 4.9, 4.7

a) Work out the mean distance.

b) Find the median distance.

c) Work out the range of the distances.

4 marks

12. Amira is training for a long-distance charity run. Over 5 days, she records the number of kilometres she runs each day:

Monday – 6.5 km, **Tuesday** – 8 km, **Wednesday** – 7.5 km, **Thursday** – 9 km

Friday – She forgets to log her distance.

The mean distance she ran over the 5 days is 8 km.

a) Work out how many kilometres Amira must have run on Friday.

b) On Saturday, she runs 11 km. What is the new mean distance over the 6 days?

c) Amira wants her average distance over 7 days to be at least 9 km. What is the minimum distance she must run on Sunday to achieve this?



1. Here are 6 numbers:

3, 5, 7, 2, 4, 9

a) Work out the mean.

5

b) Work out the range.

7

3 marks

2. Here are 7 numbers

8, 6, 7, 5, 5, 9, 4

a) Find the median.

6

b) Work out the range.

5

2 marks

3. The ages of 8 children are

6, 7, 6, 8, 6, 9, 10, 6

a) Find the mode.

6

b) Work out the mean.

7.25

3 marks

4. The shoe sizes of 10 people are

5, 6, 7, 8, 6, 5, 6, 7, 5, 6

a) Find the median.

6

b) Find the mode.

6

2 marks

5. Here are 9 test scores

56, 67, 55, 89, 90, 75, 70, 71, 84

a) Find the mean score.

73

b) Find the range of the scores.

35

3 marks

6. A class records the number of pets owned

0, 1, 2, 2, 3, 2, 4, 2, 1, 2

a) Find the mode.

2

b) Find the median.

2

2 marks

7. Here are the number of books read by 12 students

3, 4, 5, 6, 7, 5, 4, 6, 8, 5, 7, 6

a) Work out the mean.

5.5

b) Work out the range.

5

3 marks

8. The weights of 10 apples (in grams) are

150, 152, 149, 153, 151, 150, 152, 148, 150, 154

a) Find the mode.

150

b) Work out the mean weight.

150.9

3 marks



9. Kieran is given the list of numbers:

4, 7, 8, 6, 10, 2, 8

Kieren is asked to work out the median, he says:

"The middle number is 6, so the median is 6"

Kieren is wrong, explain what Kieran has done wrong.

Kieren didn't put the numbers in size order first

Kieran is also asked to work out the range, here is his working:

$$\text{Range} = 8 - 4 = 4$$

This is wrong, explain why.

Kieren didn't subtract the smallest from the biggest number

2 marks

10. Here are the times (in seconds) taken by 9 students to complete a puzzle:

11.2, 11.8, 13.2, 12.0, 11.6, 12.8, 13.0, 11.9, 12.3

a) Work out the mean time.

12.2

b) Find the median time.

12

c) Work out the range of the times.

2

4 marks

11. The following are the distances (in km) run by 7 athletes during training:

4.6, 5.2, 4.8, 5.0, 5.1, 4.9, 4.7

a) Work out the mean distance.

4.9

b) Find the median distance.

4.9

c) Work out the range of the distances.

0.6

4 marks

12. Amira is training for a long-distance charity run. Over 5 days, she records the number of kilometres she runs each day:

Monday – 6.5 km, **Tuesday** – 8 km, **Wednesday** – 7.5 km, **Thursday** – 9 km

Friday – She forgets to log her distance.

The mean distance she ran over the 5 days is 8 km.

a) Work out how many kilometres Amira must have run on Friday.

9 km

b) On Saturday, she runs 11 km. What is the new mean distance over the 6 days?

8.5 km

c) Amira wants her average distance over 7 days to be at least 9 km. What is the minimum distance she must run on Sunday to achieve this?

12 km