

Name: _____

ASM Tuition Academy

AVERAGES

Instructions:

- **Use black ink or ball-point pen.**
- **Answer all the questions.**
- **Answer the questions in the spaces provided**
- there may be more space than you need.
- **Diagrams are NOT accurately drawn, unless otherwise indicated.**
- **You must show all you're working out.**

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.

Advice:

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

Q1. Here is a list of 10 numbers.

3 4 5 5 5 6 7 7 8 8

(a) Work out the range.

(1)

(b) Find the mode.

(1)

(c) Calculate the mean.

(2)

(Total for question 1 is 4 marks)

Q2. Here is a list of 5 numbers.

4 6 10 11 12

(a) Work out the range.

(1)

(b) Write down the median.

(1)

(c) Calculate the mean.

(2)

(Total for question 2 is 4 marks)

Q3. Here are the heights, in cm, of 8 people.

155 170 165 170 167 185 190 150

(a) Work out the range.

..... cm

(1)

(b) Find the mode.

..... cm

(1)

(c) Calculate the mean.

(2)

..... cm

(Total for question 3 is 4 marks)

Q4. Here are the weights, in grams, of 6 potatoes

150 130 125 135 145 105

(a) Work out the range.

..... cm

(1)

(b) Work out the median weight.

..... g

(2)

(Total for question 4 is 3 marks)

Q5. Here are six cards. Each card has a number on it.

20 8 10 8 15 15

(a) Work out the range of the numbers on the cards.

(1)

(b) Work out the mean of the numbers on the cards.

(2)

(Total for question 5 is 3 marks)

Q6. Here is a list of 10 numbers.

2 4 4 6 7 8 11 11 11 14

(a) Work out the range.

(1)

(b) Find the mode.

(1)

(Total for question 6 is 2 marks)

Q7. Here are seven cards. Each card has a number on it.

10 6 12 18 12 10 9

(a) Work out the range of the numbers on the cards.

(1)

(b) Work out the median of the numbers on the cards.

(2)

(c) Work out the mean of the numbers on the cards.

(2)

(Total for question 7 is 5 marks)

Q8. Here is a list of numbers.

10 8 4 5 9 7

(a) Work out the median

..... (2)

Here are six rhombus shaped cards.

There is a number on each card.

Two of the numbers are hidden.

4 5 ? 6 3 ?

The mode of the six numbers is 4

The mean of the six numbers is 5

(b) Work out the two numbers that are hidden.

..... , (2)

(Total for question 8 is 4 marks)

Q9. Here is a list of numbers.

15 20 16 21 11 14 19

(a) Find the range

..... (2)

(b) Calculate the mean

..... (2)

Jane says, “The median is the middle number, so the median is 21.

(c) Jane is incorrect, explain why.

..... (1)

(Total for question 9 is 5 marks)

Q10. Here is a list of seven numbers. One of the numbers is hidden.

12 6 7 10 7 9 ?

The mean of the numbers is 9.

Find the value of the hidden (question marked) number.

.....
(Total for question 10 is 2 marks)

Q11. The mean of eight numbers is 40.

The mean of two of the numbers is 30.

Work out the mean of the other six numbers.

(Total for question 11 is 3 marks)

Q12. Harry ran a mean distance of 14 km in five days.

The next day Harry ran 15 km.

Find the mean distance Harry ran in the six days.

(Total for question 12 is 3 marks)