Name: _____

GCSE (1 – 9)

Averages

Instructions

• Use **black** ink or ball-point pen.
• Answer all 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 your 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 the time.
• Try to answer every Question.
• Check your answers if you have time at the end

1   Here is a list of 10 numbers.

    2   3   4   4   4   5   6   6   7   7

(a) Work out the range.

.….........................
(1)

(b) Find the mode.

.….........................
(1)

(c) Calculate the mean.

.….........................
(2)

(Total for question 1 is 4 marks)

2   Here is a list of 5 numbers.

    4   6   9   10   11

(a) Work out the range.

.….........................
(1)

(b) Write down the median.

.….........................
(1)

(c) Calculate the mean.

.….........................
(2)

(Total for question 2 is 4 marks)

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

$$155 \quad 171 \quad 164 \quad 171 \quad 167 \quad 188 \quad 190 \quad 151$$

(a) Work out the range.

…......................… cm

(1)

(b) Find the mode.

…......................… cm

(1)

(c) Calculate the mean.

…......................… cm

(2)

(Total for question 3 is 4 marks)

4　Here are the weights, in grams, of 6 potatoes

$$150 \quad 129 \quad 125 \quad 133 \quad 144 \quad 105$$

(a) Work out the range.

…..........................

(1)

(b) Work out the median weight.

…......................… g

(2)

(Total for question 4 is 3 marks)

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

| 19 | 7 | 11 | 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)

6 Here is a list of 10 numbers.

1   4   4   5   6   8   11   11   11   14

(a) Work out the range.

…........................
(1)

(b) Find the mode.

…........................
(1)

(Total for question 6 is 2 marks)

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

| 12 | 5 | 10 | 18 | 12 | 11 | 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)
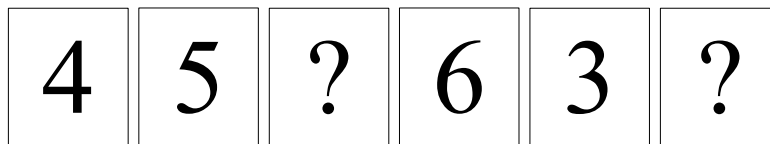
8 Here is a list of numbers.

8   6   4   5   9   8

(a) Work out the median

…......................

(2)

Here are six 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)

9 Here is a list of numbers.

14   19   15   20   11   14   19

(a) Find the range

….........................
(2)

(b) Calculate the mean

….........................
(2)

Andrew says,
"The median is the middle number, so the median is 20."

(c) Andrew is incorrect, explain why.

----
(1)

(Total for question 9 is 5 marks)

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

| 11 | 6 | 7 | 10 | 7 | 9 | ? |

The mean of the numbers is 9.

Find the value of the hidden number.

….........................

(Total for question 10 is 2 marks)

11　　The mean of eight numbers is 41.
　　　　The mean of two of the numbers is 29.
　　　　Work out the mean of the other six numbers.

….........................

(Total for question 11 is 3 marks)

12　　Mark ran a mean distance of 13.2 km in five days.

　　　　The next day Mark ran 20 km.

　　　　Find the mean distance Mark ran in the six days.

….......................… km

(Total for question 12 is 3 marks)