

## Mean, Median, Mode and Range Past Paper Questions



**Q1.**

Here is a list of numbers.

4      8      5      9      10      5      6      3      4

(a) Work out the median.

.....

(2)

(b) Work out the mean.

.....

(2)

**(Total for Question is 4 marks)**

**Q2.**

Here is a list of numbers.

12   19   12   15   11   15   12   13   17

Find the median.

.....

**(Total for Question is 2 marks)**



**Q3.**

Here is a list of numbers

12    19    12    15    11    15    12    13    17

Find the median.

.....

**(Total for question = 2 marks)**

**Q4.**

Steve went on holiday.

He recorded the number of photos he took each day.

Here are his results.

20    14    21    19    27    31    19    19    24    21

(a) Find the mode.

.....

**(1)**

(b) Work out the mean.

.....

**(2)**

Steve saves his photos on a memory card.

The memory card has 1000 megabytes of memory space.

Each photo uses 2.4 megabytes of memory space.

Steve has saved 320 photos on the memory card.

(c) Work out how many more photos Steve can save on the memory card.

.....

**(3)**

**(Total for question = 6 marks)**



**Q5.**

Vicky counts the number of birds in her garden at 8 am on each of 10 days.

5   3   3   2   0   2   4   2   4   15

(a) Write down the mode.

.....

(1)

(b) Work out the mean.

.....

(2)

Vicky counts the number of birds in her garden at 5 pm on each of 20 days.

She records the information in a frequency table.

Number of birds	Frequency
0	3
1	2
2	3
3	4
4	5
5	3

(c) Work out the total number of birds Vicky records in the frequency table.

.....

(2)

**(Total for Question is 5 marks)**



**Q6.**

Here is the number of goals scored by a football team in each of its first 10 games.

3      1      4      2      0      1      1      1      3      2

(a) Write down the mode.

.....

(1)

(b) Work out the mean number of goals for the first 10 games.

.....

(2)

In the 11th game the team scored 4 goals.

In the 12th game the team scored 2 goals.

\*(c) Will the mean number of goals for the 12 games be greater than or less than the mean number of goals for the first 10 games?

You must explain your answer.

(2)

**(Total for Question is 5 marks)**



**Q7.**

The table shows information about the numbers of Year 10 students absent from Ellen's school last week.

	Monday	Tuesday	Wednesday	Thursday	Friday
Number of students	12	6	7	10	13

(a) Work out the mean number of Year 10 students absent each day.

.....  
(2)

Ellen's school has a total of 240 Year 10 students.

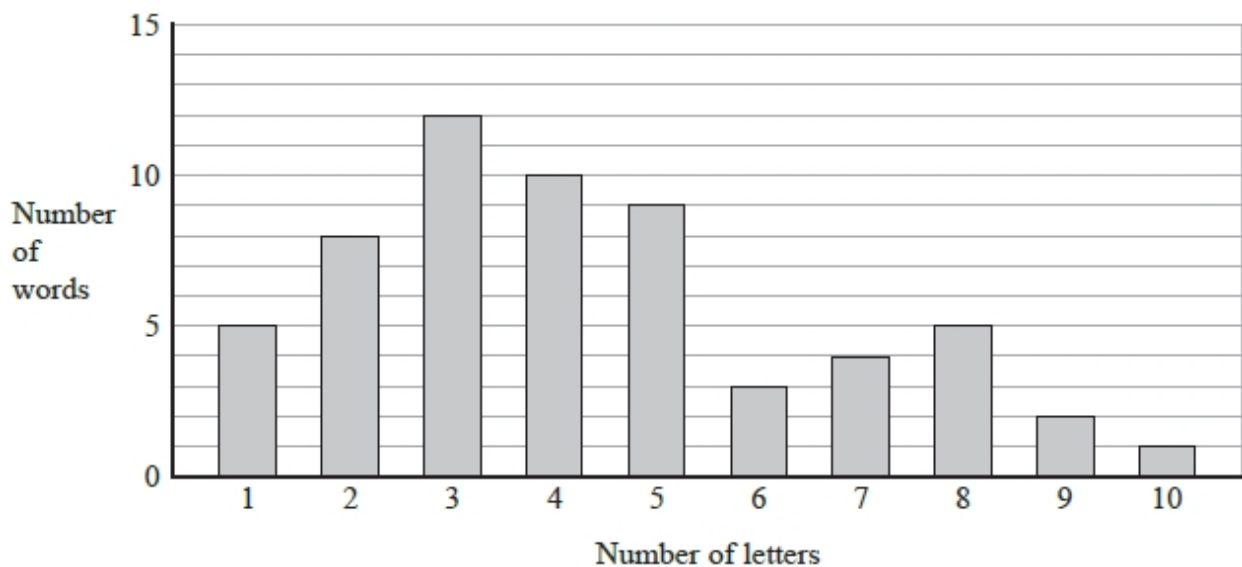
(b) What percentage of Year 10 students were absent on Monday?

..... %  
(2)

**(Total for question = 4 marks)**

**Q8.**

The bar chart shows some information about the number of letters in each word in a paragraph.



*[Continued]*



(a) What is the modal number of letters in a word?

.....  
(1)

(b) Work out the range for the numbers of letters in a word.

.....  
(2)

(c) Work out the fraction of the words that have at least six letters.

.....  
(3)

**(Total for question = 6 marks)**

**Q9.**

Here are the ages, in years, of 10 children.

4    9    6    7    3    5    2    6    4    6

(a) Find the mode.

..... years  
(1)

(b) Work out the median.

..... years  
(2)

(c) Work out the range.

..... years  
(2)

**(Total for question = 5 marks)**



**Q10.**

Here are the ages, in years, of 18 children.

12	13	13	11	12	13
11	13	12	10	11	12
13	11	10	13	12	13

(a) Find the mode.

.....

(1)

(b) Work out the median.

.....

(2)

**(Total for Question is 3 marks)**

**Q11.**

4 red bricks have a mean weight of 5 kg.  
5 blue bricks have a mean weight of 9 kg.  
1 green brick has a weight of 6 kg.

Donna says,

"The mean weight of the 10 bricks is less than 7 kg."

Is Donna correct?

You must show how you get your answer.

**(Total for question = 3 marks)**



**Q12.**

Akhtar, Ben and Carl each have some money.

Akhtar has £65

Ben has £100

Carl has three £5 notes, one £20 note and some £10 notes.

The mean amount of money per person is £80

How many £10 notes does Carl have?

.....  
**(Total for question = 4 marks)**

**Q13.**

Ed has 4 cards.

There is a number on each card.

12

6

15

?

The mean of the 4 numbers on Ed's cards is 10

Work out the number on the 4th card.

.....  
**(Total for Question is 3 marks)**

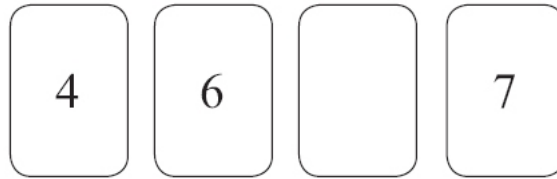




**Q14.**

Here are four number cards.

One of the cards is turned over so you cannot see the number on it.



The mean of the four numbers is 6

Work out the number you **cannot** see.

.....

**(Total for Question 10 is 3 marks)**

**Q15.**

Here are five cards.



There is a whole number from 0 to 9 on each card.

The number on the last card is hidden.

The range of the five numbers is 6

(a) Write down the whole number on the last card.

.....

(1)

*[Continued]*

Here is a different set of five cards.



There is a different whole number from 0 to 9 on each card.

The number on the last card is hidden.

The median of the numbers on the five cards is 4

(b) Which whole numbers could be on the last card?

.....

(2)

**(Total for Question is 3 marks)**

**Q16.**

Dara has four number cards.

Each card has a positive whole number on it.

Dara puts the cards on a table so that the numbers are in order, starting with the smallest number.

Two of the cards are turned over and you cannot see the numbers on them.



The median of the four numbers is 5

(i) Complete the cards below to show two numbers that could be on the cards that are turned over.



(ii) Complete the cards below to show two other numbers that could be on the cards that are turned over.



**(Total for question = 2 marks)**