

1. Find the mean, mode and median of the set of data given below.

12, 18, 15, 7, 10, 18, 20, 30

2. Find the mean and the standard deviation of the set of data given below.

5, 12, 18, 15, 20

3. Calculate the mean and standard deviation by using the data given below.

$$n=40, \Sigma x = 290, \Sigma x^2 = 8469.$$

4. For a set of 9 numbers,  $\Sigma(x-\bar{x})^2 = 234$ . Find the standard deviation of the numbers.

5. The mean of the numbers 3, 6, 7, a, 14 is 8. Find the value of a.

6. The mean of the numbers 2, 3, a, 9 is 5. Find the standard deviation of the numbers.

7. For a set of 12 numbers, it is given that  $\Sigma(x-\bar{x})^2 = 96$ . It is also given that  $\Sigma x^2 = 396$ . Find the mean.

8. A test is taken by 36 students. Their marks have a mean of 60 and standard deviation of 20. Find  $\Sigma x$  and  $\Sigma x^2$ .

9. The mean height of 20 boys and 30 girls are 160cm and 155 cm. respectively. Find the mean height of 50 children.

10. For a particular set of observations,

$$\Sigma f = 20, \Sigma fx = 997, \Sigma fx^2 = 49711$$

Find the mean and variance.

11. The mean of 10 numbers is 8. If an eleventh number is now included, the mean becomes 9. What is the value of the eleventh number?

12. A sample of 100 boxes of matches was taken and a record made of the number of matches per box. The results were as follows.

Number of matches per box	47	48	49	50	51
Frequency	4	20	35	24	17

Calculate the mean number of matches per box.

13. The table shows the speeds of 200 vehicles passing a particular point.

Speed km per hr.	30 and < 40	40 and < 50	50 and < 60	60 and < 70	70 and < 80
Frequency	14	36	80	40	30

Find the mean speed.

14. The table shows the number of children per family for a group of 20 families. Find the mean and the standard deviation.

Number of children per family	1	2	3	4	5
Frequency	3	4	8	2	3

15. The frequency distribution of marks obtained by a group of students in an examination is given below.

Marks	2	3	4	5	6	7	8	9
Frequency	3	7	12	18	25	20	a	6

If the mean is 5.8, find the value of a.

Answers:

- (1) 16.25, 18, 16.5      (2) 14, 5.25      (3) 29, 2.43      (4) 5.1      (5) 10  
 (6) 2.74      (7) 5      (8) 2160, 144000      (9) 157      (10)  
 (11) 49.85, 0.5275      (12) 19      (13) 49.3      (14) 56.8  
 (15) 2.9, 1.22      (16) 10