1. If the median of the dataset 𝑥𝑖,𝑖=1,2,...,𝑛*xi*​,*i*=1,2,...,*n*, is 12, what is the median of the dataset 3𝑥𝑖+4,𝑖=1,....,𝑛3*xi*​+4,*i*=1,....,*n*?

2. The sample mean and sample variance of five data values are, respectively 13.6 and 25.8. If three of the data values are 7, 13 and 20, what are the other two data values?

3. The mean of the 20 values in a given dataset is 50. When these values are rearranged in a certain order, the mean of the first 10 values and the last 11 values are 40 and 60 respectively. Find the tenth value after the rearrangement.

4. The median of a set of 21 data points arranged in ascending order is 15. All the data points in the given dataset are greater than 10. If it is noticed that a data point whose value is 13 was incorrectly entered as 11, what will be the revised value of the median?

5. The mean and population variance of a data 3,8,9,𝑥1, *x*2​ are 9 and 13.2 respectively. Find the 75𝑡ℎ percentile for the given dataset.?

6. Given the dataset: 4,5,x,12,14. The mean is 9. What is the approximate sample standard deviation of the new dataset after adding 44 to each number of the given dataset?

**Answers**

1. Median of the second dataset is 40.

2. The two values are 11 and 17.

3. The tenth value is 60.

4. The median will remain the same, ie, 15.

5. The 75th Percentile is 10.5.

6. Since the added value is constant throughout the dataset, the spread will not change. Therefore, the Standard Deviation will remain the same, which is, 4.36.