

National Institute of Open Schooling (NIOS)
Senior Secondary Course
Lesson – 17: Measures of Dispersions
Worksheet -17

1. In a Mathematics test, 10 students secured marks as:

30, 78, 40, 28, 30, 45, 50, 49, 50, 48.

Find the mean deviation about the median.

2. Find the mean deviation about the mean of following data

x_i	10	31	50	70	90
f_i	5	25	28	16	6

3. Players height in a tournament as:

Height in cm	90-100	100-110	110-120	120-130	130-140
Number of players	10	20	15	25	30

Find the mean deviation about the mean.

4. Find out the mean deviation about the median of following data as:

42, 40, 60, 65, 72, 75.

5. If $N = 10$, $\bar{x} = 12$, $\sum x_i^2 = 1530$, then find out the co-efficient of variation.
6. The mean and standard deviation of Six observations are 8 and 4 respectively. If each observation is multiplied by 3, find the new mean and new standard deviation of resulting observation.
7. The standard deviation of some temperature data in degree centigrade is 6. If the data is to be converted in to Faranite scale, find the variance.
8. Mean of 10 items is 15. If an observation 27 is replaced with 72, find out the new mean.
9. The smallest value of a collection of data is 12 and the range is 56. Find the largest value of the collection of data.
10. Find out the standard deviation of first 20 natural numbers.