

VIDYA BHAWAN BALIKA VIDYA PITH

शक्तिउत्थानआश्रमलखीसरायबिहार

Class 11 commerce Sub. ECO/B Date 19.01.2021

Teacher name – Ajay Kumar Sharma

Example 3

Calculate the mean deviation of the following values; 2, 4, 7, 8 and 9.

$$\text{The A.M.} = \frac{\sum X}{n} = 6$$

X	$ d $
2	4
4	2
7	1
8	2
9	3
	12

$$\text{M.D.}_{(\bar{x})} = \frac{12}{5} = 2.4$$

Mean Deviation from median for ungrouped data.

Method Using the values in Example 3, M.D. from the Median can be calculated as follows,

- Calculate the median which is 7.
- Calculate the absolute deviations from median, denote them as $|d|$.
- Find the average of these absolute deviations. It is the Mean Deviation.

Example 5

X	$d = X - \text{MEDIAN} $
2	5
4	3
7	0
8	1
9	2
	11

M. D. from Median is thus,

$$\text{M.D.}_{(\text{Median})} = \frac{\sum |d|}{n} = \frac{11}{5} = 2.2$$

