CBSE Class –VII Mathematics
NCERT Solutions
Chapter 3 Data Handling (Ex. 3.2)

Question 1. The scores in mathematics test (out of 25) of students is as follows:

19, 25, 23, 20, 9, 20, 15, 10, 5, 16, 25, 20, 24, 12, 20

Find the mode and median of this data. Are they same?

Answer: Arranging the given data in ascending order,

5, 9, 10, 12, 15, 16, 19, 20, 20, 20, 20, 23, 24, 25, 25

Mode is the observation occurred the highest number of times.

Therefore, Mode = 20

Median is the middle observation = 20

Yes, Mode and Median are same of given observation.

Question 2. The runs scored in a cricket match by 11 players is as follows:

6, 15, 120, 50, 100, 80, 10, 15, 8, 10, 15

Find the mean, mode and median of this data. Are the three same?

Answer: Arranging the given data in ascending order,

6, 8, 10, 10, 15, 15, 15, 50, 80, 100, 120

Mean = $\dfrac{\text{Sum of observations}}{\text{Number of observations}}$

= $\dfrac{6+8+10+10+15+15+15+50+80+100+120}{11}$ = $\dfrac{429}{11}$ = 39

Mode is the observation occurred the highest number of times = 15

Median is the middle observation = 15

Therefore, Mode and Median is 15.

No, the mean, median and mode are not same.

Question 3. The weight (in kg) of 15 students of a class are:

38, 42, 35, 37, 45, 50, 32, 43, 43, 40, 36, 38, 43, 38, 47

(i) Find the mode and median of this data.

(ii) Is there more than one mode?

Answer: Arranging the given data in ascending order,

32, 35, 36, 37, 38, 38, 38, 40, 42, 43, 43, 43, 45, 47, 50

(i) Mode is the observation occurred the highest number of times.

Therefore, Mode = 38 and 43

(ii) Median is the middle observation = 40

Yes, there are 2 modes.

Question 4. Find the mode and median of the data:

13, 16, 12, 14, 19, 12, 14, 13, 14

Answer: Arranging the given data in ascending order,

12, 12, 13, 13, 14, 14, 14, 16, 19

Mode is the observation occurred the highest number of times = 14

Median is the middle observation = 14

Question 5. Tell whether the statement is true or false:

(i) The mode is always one of the numbers in a data.

(ii) The mean is one of the numbers in a data.

(iii) The median is always one of the numbers in a data.

(iv) The data 6, 4, 3, 8, 9, 12, 13, 9 has mean 9.

Answer: (i) True

(ii) False

(iii) True

(iv) False