

**NCERT SOLUTIONS FOR CLASS 7 MATHEMATICS | DATA HANDLING | EXERCISE 3.2**

**1. The scores in mathematics test (out of 25) of 15 students are 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:

Mode = 20, because 20 occurs more number of times.

To find Median, first arrange the numbers in either ascending order or descending order.

Ascending order ; 5, 9, 10, 12, 15, 16, 19, 20, 20, 20, 20, 23, 24, 25, 25.

Middle number is 20.

Therefore, Median = 20.

Mode and Median of this data are same.

**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:

$$\text{Mean} = \frac{\text{Sum of all observations}}{\text{Number of observations}} = \frac{6+15+120+50+100+80+10+15+8+10+15}{11} = \frac{429}{11} = 39$$

Mode = 15 (since it occurs 3 times)

To find Median, first arrange the numbers in either ascending or descending order.

Ascending order; 6, 8, 10, 10, 15, 15, 15, 50, 80, 100, 120

Median = 15.

Mean, Mode and Median of this data are not the same.

**3. The weights (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:

i) Mode = 38, 43(since 38 & 43 occurs three times)

Ascending order; 32, 35, 36, 37, 38, 38, 38, 40, 42, 43, 43, 43, 45, 47, 50.

Median = 40 (Middle term)

ii) Yes, there are 2 modes.

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

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

Answer:

Mode = 14 (since it occurs 3 times)

Ascending order; 12, 12, 13, 13, 14, 14, 14, 16, 19

Median = 14(Middle term)

**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

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