

Class 10 Mathematics - Statistics

Name: _____

Date: _____

Advanced Worksheet 1

Questions

1. The following distribution shows the marks obtained by 40 students.

Marks	Frequency
0–10	3
10–20	5
20–30	9
30–40	12
40–50	7
50–60	4

Find the mean using the Direct Method.

2. Find the class marks of the classes:
(a) 10–20

(b) 20–30

(c) 30–40

3. State the formula for mean using the Assumed Mean Method.
4. State the formula for mean using the Step-Deviation Method.
5. Why is the Step-Deviation Method preferred for large data?
6. State one limitation of the Direct Method.

Answer Key

1. Mean = 32.25

2.

(a) 15

(b) 25

(c) 35

3. Mean = $a + (\Sigma fidi / \Sigma fi)$

4. Mean = $a + h(\Sigma fiui / \Sigma fi)$

5. It reduces lengthy calculations.

6. Multiplication becomes tedious when values are large.