



**Class-5**

**Subject-Mathematics**

**Chapter-13 (Data Arrangement)**

**Date: 22/10/2020**

**Lecture- 01**

**Data:** Collection of information.

- Data is plural for 'Datum'
- 'Datum' is a Latin word.

**Class interval:** The difference between upper and lower class boundaries of a class.

<b>Mark Class interval</b>	<b>Number</b>
1 – 10	7
11 – 20	5
21 - 30	9

**Tally Marks:** Tally marks are a quick way of keeping track of numbers in groups of five.

One vertical line is made for each of the first four numbers; the fifth number is represented by a diagonal line across the previous four.

<b>1</b>		<b>6</b>	
<b>2</b>		<b>7</b>	
<b>3</b>		<b>8</b>	
<b>4</b>		<b>9</b>	
<b>5</b>		<b>10</b>	

Example – 1: Show the distribution data of section A students.

Section–A: 25, 24, 15, 20, 23, 29, 26, 17, 22, 26, 14, 18, 24, 26, 8, 27, 25, 9

**Solution:** The given data are arranged in ascending order: 8, 9, 14, 15, 17, 18, 20, 22, 23, 24, 24, 25, 25, 26, 26, 26, 27, 29.

Lowest value of the data = 8

Height value of the data = 29

∴ Range = (29 - 8) + 1 = 21+1 = 22

∴ Number of class with class interval 5 =  $\frac{22}{5} = 4.5 \approx 5$

Class interval	Tally	Number
5 – 9	II	2
10 – 14	I	1
15 – 19	III	3
20 – 24		5
25 - 29	II	7

Total = 18

### Exercise

1. Show the distribution data of section B students

Section B: 12, 14, 24, 29, 16, 12, 9, 29, 20, 16, 28, 12, 8, 29, 24, 29, 12, 6, 22, 28.

2. The following data shows the height of grade 5 students in one school. Prepare the table in 3 different class intervals as shown below.

Height of students (in centimetres)

130, 132, 134, 128, 121, 123, 138, 124, 134, 139, 122, 124, 126, 128, 123,  
126, 130, 131, 137, 135, 121, 125, 131, 134, 133, 141, 129, 133, 126, 128

**Table 1**

Height Interval	Number
120 - 123	
124 – 126	
127 – 129	
130 – 132	
133 – 135	
136 – 138	
139 – 141	
Total	

**Table 2**

Height Interval	Number
120 – 124	
125 – 129	
130 – 134	
135 – 139	
140 – 144	
Total	

**Table 3**

Height Interval	Number
120 – 129	
130 – 139	
140 – 149	
Total	

