

## Measures of Dispersion. (5)

- (2) Discrete frequency Series or frequency Array and Range. As in the case of individual series, range of the discrete series is determined as the difference between the highest value and the lowest value of the series. Frequency of the series is not taken into account.

Illustration:

Calculate range and coefficient of range of the following series.

Size	10	11	12	13	14	15	16	18
frequency	1	13	24	14	15	13	16	20

Soln.

$$\text{Here } H = 18 \quad L = 10$$

$$\text{Range} = H - L = 18 - 10 = 8 \text{ in}$$

Coefficient of Range (CR)

$$= \frac{H - L}{H + L} = \frac{18 - 10}{18 + 10} = \frac{10}{28} = 0.29 \text{ in}$$

## Learning by doing (H.W)

1. Calculate range and the coefficient of range of the following series:

Marks	10	20	30	40	50	60	70
No. of student	15	18	25	30	16	10	9

Ans -  $R = 60$        $CR = 0.75$

(2) Find out the range and the coefficient of range from the following data:

Daily wage ₹	6	7	8	9	10	11	12	15
No. of workers	10	15	12	18	25	20	10	4

Ans -  $R = 9$ ,       $CR = 0.429$ .

To be continued.  
Thank you.