Representation of data

⇒ Discrete data

→ Mean = $\frac{\Sigma x}{n}$

⇒ Grouped Data

→ Mean = $\frac{\Sigma fx}{\Sigma f}$

Note: Standard deviation = sigma σ

Sigma^2 = variance

Sigma = $\sqrt{\text{variance}}$

⇒ Discrete data

→ Variance = $\frac{\Sigma x^2}{n} - \left[\frac{\Sigma x}{n}\right]^2$

→ Standard Deviation = $\sqrt{\frac{\Sigma x^2}{n} - \left[\frac{\Sigma x}{n}\right]^2}$

⇒ Grouped Data

→ Variance = $\frac{\Sigma fx^2}{\Sigma f} - \left[\frac{\Sigma fx}{\Sigma f}\right]^2$

→ Standard Deviation = $\sqrt{\frac{\Sigma fx^2}{\Sigma f} - \left[\frac{\Sigma fx}{\Sigma f}\right]^2}$

⇒ Assumed Mean

→ Mean = $\frac{\Sigma(x-a)}{n} + a$

→ Variance = $\frac{\Sigma(x-a)^2}{n} - \left[\frac{\Sigma(x-a)}{n}\right]^2$

If given to find Σx^2 equate:

$\frac{\Sigma x^2}{n} - \left[\frac{\Sigma x}{n}\right]^2 = \frac{\Sigma(x-a)^2}{n} - \left[\frac{\Sigma(x-a)}{n}\right]^2$