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DEF: Sample Variance $\equiv S^2 = \frac{1}{n-1}\sum_{i=1}^{n}(X_i - \bar{X})^2$

DEF: Computed Sample Variance $\equiv s^2 = \frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2$

DEF: Sample Standard Deviation $\equiv S = \sqrt{S^2} = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(X_i - \bar{X})^2}$

DEF: Computed Standard Deviation $\equiv s = \sqrt{s^2} = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2}$

WHERE $n \equiv$ number of samples

$X_i \equiv$ random variables representing n samples (assumed independent and identically distributed)

$\bar{X} \equiv$ random variable representing sample mean

$x_i \equiv n$ actual sample values

$\bar{x} \equiv$ computed sample mean