The statistics in this window are updated automatically as you enter values of $X$ into the DataGen Spreadsheet.

Number of observations $n$

Sum of observations $\sum X$

Sum of squared observations $\sum X^2$

Sum of squared deviations $\sum (X - \bar{X})^2$

Sample mean $\bar{X} = \frac{\sum X}{n}$

Standard deviation [of a sample] $S = \sqrt{\frac{\sum (X - \bar{X})^2}{n-1}}$

Variance $S^2 = \frac{\sum (X - \bar{X})^2}{n-1}$

Standard error [of the means] $S_{\bar{X}} = \frac{S}{\sqrt{n}}$

Critical value of $t$ $t_{cv}$: Student’s $t$; $df = n - 1$, $\alpha = .05$

Confidence interval [for $\mu$] minimum $\bar{X} - t_{cv}S_{\bar{X}} \leq \mu \leq \bar{X} + t_{cv}S_{\bar{X}}$