Student t distribution

Statistical Analysis using Z-score we need population standard deviation (σ)

How do we perform an analysis when we don't know the population standard deviation?

Soln: Student t distribution

$$Z = \frac{\bar{x} - \mu}{\sigma/\sqrt{n}} \qquad \boxed{t = \frac{\bar{x} - \mu}{S/\sqrt{n}}} \qquad S = \text{sample std}$$

Degree of freedom

$$dof = n - 1 \qquad\qquad n = \text{sample size}$$

3 people ☒ ☐ ☒

https://www.sjsu.edu/faculty/gerstman/StatPrimer/t-table.pdf