CheatSheet

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Z-test (σ (SD of population) is known): $Z = \frac{\bar{X}-\mu}{\frac{\sigma}{\sqrt{n}}}$; standard error: $\sigma_{\bar{X}} = \frac{\sigma}{\sqrt{n}}$; $z \sim N(0,1)$; $(1-\alpha)CI = \bar{X} \pm Z_{\frac{\alpha}{2}} S_{\bar{X}}$ One-sample t-test (σ is unknown): $t = \frac{\bar{X}-\mu}{\frac{S}{\sqrt{n}}}$; standard error: $\S_{\bar{X}} = \frac{S}{\sqrt{n}}$; $t \sim t_{n-1}, \alpha/2$; $(1-\alpha)CI = \bar{X} \pm t_{n-1,\frac{\alpha}{2}} S_{\bar{X}}$