

	Proportion	Mean	Variance/StDev
Central Limit Theorem	yes	yes	no
Population	p	μ	σ^2 / σ
Sample	\hat{p}	\bar{x}	s^2 / s
Requirements	$n > 30$	$n > 30$ or x normally distributed	x normally distributed
Distribution	normal	normal	chi-squared distribution
Critical Values	$z_{\alpha/2}$	$t_{\alpha/2}$ (if σ unknown, otherwise $z_{\alpha/2}$)	χ_L^2 and χ_R^2
Parameters of Distribution	$\mu_{\hat{p}} = p$	$\mu_{\bar{x}} = \mu$	
	$\sigma_{\hat{p}} = \sqrt{\frac{p(1-p)}{n}}$	$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$	
		$df = n - 1$	
Confidence Interval	$\hat{p} - E < p < \hat{p} + E$	$\bar{x} - E < \mu < \bar{x} + E$	$\frac{(n-1)s^2}{\chi_R^2} < \sigma^2 < \frac{(n-1)s^2}{\chi_L^2}$
Margin of Error	$E = z_{\alpha/2} \sqrt{\frac{\hat{p}\hat{q}}{n}}$	$E = t_{\alpha/2} \cdot \frac{s}{\sqrt{n}}$	n/a
Sample Size Determination	$\frac{(z_{\alpha/2})^2 \hat{p}\hat{q}}{E^2}$	$\left(\frac{z_{\alpha/2} \sigma}{E} \right)^2$	n/a
	$\frac{(z_{\alpha/2})^2 \cdot 0.25}{E^2}$		

