

	Proportion	Mean	Variance/StDev
Central Limit Theorem	yes	yes	no
Population	p	$\mu$	$\sigma^2 / \sigma$
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 $\sigma$ unknown, otherwise $z_{\alpha/2}$ )	$\chi_L^2$ and $\chi_R^2$
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	$\hat{p}-E < p < \hat{p}+E$	$\bar{x}-E < \mu < \bar{x}+E$	$\frac{(n-1)s^2}{\chi_R^2} < \sigma^2 < \frac{(n-1)s^2}{\chi_L^2}$
Sample Size Determination	$\frac{(z_{\alpha/2})^2 \hat{p}\hat{q}}{E^2}$ $\frac{(z_{\alpha/2})^2 \cdot 0.25}{E^2}$	$\left( \frac{z_{\alpha/2}\sigma}{E} \right)^2$	n/a