Parameter	Statistic	CI Assumptions	CI Formula	Hyp Test Assumptions	Hyp Test Formulas	Dist. of Test Stat.
p	$\hat{p}$	1. RS 2. $n\hat{p}$, $n(1-\hat{p}) \geq 10$ (Both)	$\hat{p} \pm z^* \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$ z^* from $N(0,1)$	1. RS 2. np_0, $n(1-p_0)$ Both ≥ 10	$z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$ ← null standard deviation	$N(0,1)$
$p_1 - p_2$	$\hat{p}_1 - \hat{p}_2$	1. 2 ⊥ RS 2. $n_1\hat{p}_1$, $n_1(1-\hat{p}_1)$, $n_2\hat{p}_2$, $n_2(1-\hat{p}_2)$ ALL ≥ 10.	$\hat{p}_1 - \hat{p}_2 \pm z^* \sqrt{\frac{\hat{p}_1(1-\hat{p}_1)}{n_1} + \frac{\hat{p}_2(1-\hat{p}_2)}{n_2}}$ z^* from $N(0,1)$	Same as for CI unless you want to replace $\hat{p}_1$ and $\hat{p}_2$ with $\hat{p}$ - estimate of common proportion	$\hat{p} = \frac{n_1\hat{p}_1 + n_2\hat{p}_2}{n_1 + n_2}$ $z = \frac{\hat{p}_1 - \hat{p}_2 - 0}{\sqrt{\frac{\hat{p}(1-\hat{p})}{n_1} + \frac{\hat{p}(1-\hat{p})}{n_2}}}$ ← null Standard error	$N(0,1)$
μ	$\bar{x}$					$t(n-1)$
μ_d	$\bar{d}$					$t(n-1)$
$\mu_1 - \mu_2$	$\bar{x}_1 - \bar{x}_2$					