

PARAMETRIC

NORMAL, KNOWN σ

σ^2

$$\chi_{N-1}^2 = (N-1) \frac{s^2}{\sigma^2}$$

LARGE N: $z_N = \frac{(\sum N - \sigma) \sqrt{2N}}{\sigma}$

μ

NORMAL, KNOWN σ

POPP. PROPORTION

$$z = \frac{\hat{p} - p_0}{\sqrt{p_0(1-p_0)/N}}$$

N < 40

$$z = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{N}}$$

N > 40

$$z = \frac{\bar{x} - \mu}{s/\sqrt{N}}$$

NONNORMAL, UNKNOWN σ

$$T = \frac{\bar{x} - \mu}{s/\sqrt{N}}$$

TWO POPULATIONS

NORMAL, KNOWN σ

$$z = \frac{\bar{x} - \bar{y} - \Delta_0}{\sqrt{\frac{\sigma_1^2}{n} + \frac{\sigma_2^2}{N}}}$$

UNKNOWN DIST, LARGE SAMPLES

$$z = \frac{\bar{x} - \bar{y} - \Delta_0}{\sqrt{\frac{s_1^2}{n} + \frac{s_2^2}{N}}}$$

TWO SAMPLES

μ

PAIRS

UNKNOWN DIST, SMALL SAMPLES

$$T = \frac{\bar{x} - \bar{y} - \Delta_0}{\sqrt{\frac{s_1^2}{n} + \frac{s_2^2}{N}}}$$

PROPORTIONS

σ^2

PAIRED T-TEST

$$T = \frac{\bar{d} - \Delta_0}{s_d/\sqrt{N}}$$

INDEPENDENT

$$H_0: \sigma_1 = \sigma_2$$

F-TEST

$$F = \frac{s_1^2}{s_2^2}$$

$$T_N = R_N \cdot \sqrt{\frac{N-2}{1-R_N^2}}$$

$$z = \frac{\hat{p}_1 - \hat{p}_2 - (p_1 - p_2)}{\sqrt{\frac{pq_1}{n} + \frac{pq_2}{N}}}$$

NONPARAMETRIC

HT