TESTES A MÉDIAS, VARIÂNCIAS E PROPORÇÕES

Parâmetros	Condições	H_0	H_1	Estatística	Região Crítica
μ	dist. normal e σ conhecido; ou n 'grande' (se σ desconhec. usar s-desvio padrão amostral)	$\mu = \mu_0$ $\mu \leq \mu_0$ $\mu \geq \mu_0$	$\mu \neq \mu_0$ $\mu > \mu_0$ $\mu < \mu_0$	$Z = \frac{\overline{X} - \mu_0}{\sigma/\sqrt{n}}$	$Z < -z_{\alpha/2}$ ou $Z > z_{\alpha/2}$ $Z > z_\alpha$ $Z < -z_\alpha$
μ	σ desconhecido distribuição normal	$\mu = \mu_0$ $\mu \leq \mu_0$ $\mu \geq \mu_0$	$\mu \neq \mu_0$ $\mu > \mu_0$ $\mu < \mu_0$	$T = \frac{\overline{X} - \mu_0}{S_x/\sqrt{n}}$ c/ $(n-1)$g.l.	$T < -t_{\alpha/2}$ ou $T > t_{\alpha/2}$ $T > t_\alpha$ $T < -t_\alpha$
$\mu_1 - \mu_2$	amostras independentes pop. normais e σ_1 e σ_2 conhec. **ou** n_1 e n_2 'grandes'	$\mu_1 = \mu_2$ $\mu_1 \leq \mu_2$ $\mu_1 \geq \mu_2$	$\mu_1 \neq \mu_2$ $\mu_1 > \mu_2$ $\mu_1 < \mu_2$	$Z = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{(\sigma_1^2/n_1) + (\sigma_2^2/n_2)}}$	$Z < -z_{\alpha/2}$ ou $Z > z_{\alpha/2}$ $Z > z_\alpha$ $Z < -z_\alpha$
$\mu_1 - \mu_2$	amostras independentes, pop. normais e σ_1 e σ_2 desconh. mas supostos iguais	$\mu_1 = \mu_2$ $\mu_1 \leq \mu_2$ $\mu_1 \geq \mu_2$	$\mu_1 \neq \mu_2$ $\mu_1 > \mu_2$ $\mu_1 < \mu_2$	$T = \frac{\overline{X}_1 - \overline{X}_2}{S_p\sqrt{(1/n_1) + (1/n_2)}}$ $S_p = \sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1+n_2-2}}$ c/ $(n_1 + n_2 - 2)$ g.l.	$T < -t_{\alpha/2}$ ou $T > t_{\alpha/2}$ $T > t_\alpha$ $T < -t_\alpha$
μ_D diferença de duas médias	amostras emparelhadas; pop. das diferenças normal e σ_D conhecido; **ou** n 'grande'	$\mu_D = 0$ $\mu_D \leq 0$ $\mu_D \geq 0$	$\mu_D \neq 0$ $\mu_D > 0$ $\mu_D < 0$	$Z = \frac{\overline{D}}{\sigma_D/\sqrt{n}}$ c/ $D_j = X_{1j} - X_{2j}$	$Z < -z_{\alpha/2}$ ou $Z > z_{\alpha/2}$ $Z > z_\alpha$ $Z < -z_\alpha$
μ_D diferença de duas médias	amostras emparelhadas; pop.das diferenças normal e σ_D desconhec.	$\mu_D = 0$ $\mu_D \leq 0$ $\mu_D \geq 0$	$\mu_D \neq 0$ $\mu_D > 0$ $\mu_D < 0$	$T = \frac{\overline{D}}{S_D/\sqrt{n}}$ c/ $(n-1)$ g.l.	$T < -t_{\alpha/2}$ ou $T > t_{\alpha/2}$ $T > t_\alpha$ $T < -t_\alpha$
σ^2	distribuição normal	$\sigma^2 = \sigma_0^2$ $\sigma^2 \leq \sigma_0^2$ $\sigma^2 \geq \sigma_0^2$	$\sigma^2 \neq \sigma_0^2$ $\sigma^2 > \sigma_0^2$ $\sigma^2 < \sigma_0^2$	$\chi^2 = \frac{(n-1)S^2}{\sigma_0^2}$ c/ (n-1) g.l.	$\chi^2 < \chi^2_{1-\alpha/2}$ ou $\chi^2 > \chi^2_{\alpha/2}$ $\chi^2 > \chi^2_\alpha$ $\chi^2 < \chi^2_{1-\alpha}$
$\frac{\sigma_1^2}{\sigma_2^2}$	distribuições normais independ.	$\sigma_1^2 = \sigma_2^2$ $\sigma_1^2 \leq \sigma_2^2$ $\sigma_1^2 \geq \sigma_2^2$	$\sigma_1^2 \neq \sigma_2^2$ $\sigma_1^2 > \sigma_2^2$ $\sigma_1^2 < \sigma_2^2$	$F = \frac{S_1^2}{S_2^2}$ c/ $(n_1 - 1, n_2 - 1)$ g.l.	$F < f_{1-\alpha/2}$ ou $F > f_{\alpha/2}$ $F > f_\alpha$ $F < f_{1-\alpha}$
p	provas repetidas independência n 'grande'	$p = p_0$ $p \leq p_0$ $p \geq p_0$	$p \neq p_0$ $p > p_0$ $p < p_0$	$Z = \frac{X - n\,p_0}{\sqrt{n\,p_0\,(1-p_0)}}$	$Z < -z_{\alpha/2}$ ou $Z > z_{\alpha/2}$ $Z > z_\alpha$ $Z < -z_\alpha$
$p_1 - p_2$	n_1 e n_2 'grandes'	$p_1 = p_2$ $p_1 \leq p_2$ $p_1 \geq p_2$	$p_1 \neq p_2$ $p_1 > p_2$ $p_1 < p_2$	$Z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\hat{p}\hat{q}(1/n_1 + 1/n_2)}}$ com $\hat{p} = \frac{x_1+x_2}{n_1+n_2}$	$Z < -z_{\alpha/2}$ ou $Z > z_{\alpha/2}$ $Z > z_\alpha$ $Z < -z_\alpha$