Índice

1. Fórmulas

2. Tablas estadísticas

INFERENCIAS SOBRE LA MEDIA DE UNA POBLACIÓN NORMAL $N(\mu, \sigma)$

σ conocida

$$\frac{\bar{x}-\mu}{\sigma/\sqrt{n}} \to N(0, 1) \qquad I = \left[\bar{x} \mp z_{\alpha/2}\frac{\sigma}{\sqrt{n}}\right]$$

	$H_0 : \mu = \mu_0$ $H_1 : \mu \neq \mu_0$	$H_0 : \mu \leqslant \mu_0$ $H_1 : \mu > \mu_0$	$H_0 : \mu \geqslant \mu_0$ $H_1 : \mu < \mu_0$
Se acepta H_0 si	$\frac{\lvert\bar{x}-\mu_0\rvert}{\sigma/\sqrt{n}} \leqslant z_{\alpha/2}$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} \leqslant z_{\alpha}$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} \geqslant z_{1-\alpha}$
Se rechaza H_0 si	$\frac{\lvert\bar{x}-\mu_0\rvert}{\sigma/\sqrt{n}} > z_{\alpha/2}$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} > z_{\alpha}$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} < z_{1-\alpha}$

σ desconocida

$$\frac{\bar{x}-\mu}{S/\sqrt{n}} \to t_{n-1} \qquad I = \left[\bar{x} \mp t_{n-1;\alpha/2}\frac{S}{\sqrt{n}}\right]$$

	$H_0 : \mu = \mu_0$ $H_1 : \mu \neq \mu_0$	$H_0 : \mu \leqslant \mu_0$ $H_1 : \mu > \mu_0$	$H_0 : \mu \geqslant \mu_0$ $H_1 : \mu < \mu_0$
Se acepta H_0 si	$\frac{\lvert\bar{x}-\mu_0\rvert}{S/\sqrt{n}} \leqslant t_{n-1;\alpha/2}$	$\frac{\bar{x}-\mu_0}{S/\sqrt{n}} \leqslant t_{n-1;\alpha}$	$\frac{\bar{x}-\mu_0}{S/\sqrt{n}} \geqslant t_{n-1;1-\alpha}$
Se rechaza H_0 si	$\frac{\lvert\bar{x}-\mu_0\rvert}{S/\sqrt{n}} > t_{n-1;\alpha/2}$	$\frac{\bar{x}-\mu_0}{S/\sqrt{n}} > t_{n-1;\alpha}$	$\frac{\bar{x}-\mu_0}{S/\sqrt{n}} < t_{n-1;1-\alpha}$

INFERENCIAS SOBRE LA MEDIA DE UNA POBLACIÓN NO NECESARIAMENTE NORMAL. MUESTRAS GRANDES

σ conocida

$$\frac{\bar{x}-\mu}{\sigma/\sqrt{n}} \approx N(0,\,1) \qquad I = \left[\bar{x} \mp z_{\alpha/2}\,\frac{\sigma}{\sqrt{n}}\right]$$

	$H_0: \mu = \mu_0$ $H_1: \mu \neq \mu_0$	$H_0: \mu \leqslant \mu_0$ $H_1: \mu > \mu_0$	$H_0: \mu \geqslant \mu_0$ $H_1: \mu < \mu_0$
Se acepta H_0 si	$\frac{\lvert\bar{x}-\mu_0\rvert}{\sigma/\sqrt{n}} \leqslant z_{\alpha/2}$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} \leqslant z_\alpha$	$\frac{\bar{x}-\mu_0}{\sigma/\sqrt{n}} \geqslant z_{1-\alpha}$
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σ desconocida

$$\frac{\bar{x}-\mu}{S/\sqrt{n}} \approx N(0,\,1) \qquad I = \left[\bar{x} \mp z_{\alpha/2}\,\frac{S}{\sqrt{n}}\right]$$

	$H_0: \mu = \mu_0$ $H_1: \mu \neq \mu_0$	$H_0: \mu \leqslant \mu_0$ $H_1: \mu > \mu_0$	$H_0: \mu \geqslant \mu_0$ $H_1: \mu < \mu_0$
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