

Parámetro	media	varianza	estadístico	Intervalo de confianza
μ con σ conocida				$\bar{x} \pm Z_{\alpha/2} \frac{\sigma}{\sqrt{n}}$
μ con σ desconocida				$\bar{x} \pm t_{\frac{\alpha}{2}, n-1} \frac{\sigma}{\sqrt{n}}$
Proporción	np	npq		$\hat{p} \pm Z_{\alpha/2} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$
Varianza			$\chi^2_{(n-1)} \sim \frac{(n-1)S^2}{\sigma^2}$	$\frac{(n-1)s^2}{\chi^2_{\frac{\alpha}{2}, n-1}} < \sigma^2 < \frac{(n-1)s^2}{\chi^2_{1-\frac{\alpha}{2}, n-1}}$
$\mu_1 - \mu_2$ con σ_1^2 y σ_2^2 conocidas	$\mu_1 - \mu_2$	$\left(\frac{\sigma_1^2}{n_1}\right) + \left(\frac{\sigma_2^2}{n_2}\right)$	$Z = \frac{\bar{X}_1 - \bar{X}_2 - (\mu_1 - \mu_2)}{\sqrt{\left(\frac{\sigma_1^2}{n_1}\right) + \left(\frac{\sigma_2^2}{n_2}\right)}}$	$(\bar{X}_1 - \bar{X}_2) \pm Z_{\frac{\alpha}{2}} \sqrt{\left(\frac{\sigma_1^2}{n_1}\right) + \left(\frac{\sigma_2^2}{n_2}\right)}$
$\mu_1 - \mu_2$ con σ_1^2 y σ_2^2 Desconocidas pero iguales	$\mu_1 - \mu_2$	$s_p^2 = \left[\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1 + n_2 - 2} \right]$	$t_{(n_1+n_2-2)} = \frac{\bar{X}_1 - \bar{X}_2 - (\mu_1 - \mu_2)}{\sqrt{s_p^2}}$	$(\bar{X}_1 - \bar{X}_2) \pm t_{\frac{\alpha}{2}, v} S_p \sqrt{\left(\frac{1}{n_1}\right) + \left(\frac{1}{n_2}\right)}$
$\mu_1 - \mu_2$ con σ_1^2 y σ_2^2 Desconocidas y diferentes	$\mu_1 - \mu_2$	$\left(\frac{s_1^2}{n_1}\right) + \left(\frac{s_2^2}{n_2}\right)$	$Z = \frac{\bar{X}_1 - \bar{X}_2 - (\mu_1 - \mu_2)}{\sqrt{\left(\frac{s_1^2}{n_1}\right) + \left(\frac{s_2^2}{n_2}\right)}}$	$(\bar{X}_1 - \bar{X}_2) \pm t_{\frac{\alpha}{2}, v} \sqrt{\left(\frac{s_1^2}{n_1}\right) + \left(\frac{s_2^2}{n_2}\right)}$ $v = \frac{\left(\left(\frac{s_1^2}{n_1}\right) + \left(\frac{s_2^2}{n_2}\right)\right)^2}{\frac{\left(\frac{s_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{s_2^2}{n_2}\right)^2}{n_2-1}}$
Diferencias pareadas μ_d	\bar{d}		$t_{(n-1)} = \frac{\bar{d} - \mu_d}{sd/\sqrt{n}}$	$\bar{d} \pm t_{\frac{\alpha}{2}, n-1} \frac{s_d}{\sqrt{n}}$
Diferencia de proporciones	$\widehat{p}_x - \widehat{p}_y$	$\left(\frac{p_x q_x}{n_x}\right) + \left(\frac{p_y q_y}{n_y}\right)$	$Z = \frac{(\widehat{p}_x - \widehat{p}_y) - (p_x - p_y)}{\sqrt{\left(\frac{p_x q_x}{n_x}\right) + \left(\frac{p_y q_y}{n_y}\right)}}$	$(\widehat{p}_x - \widehat{p}_y) \pm Z_{\frac{\alpha}{2}} \sqrt{\left(\frac{p_x q_x}{n_x}\right) + \left(\frac{p_y q_y}{n_y}\right)}$

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Razón de varianzas			$F = \frac{S_1^2 * \sigma_2^2}{S_2^2 * \sigma_1^2}$	$\frac{S_1^2}{S_2^2} * \frac{1}{f_{\frac{\alpha}{2}, n_1-1, n_2-1}} < \frac{\sigma_1^2}{\sigma_2^2} < \frac{S_1^2}{S_2^2} * f_{\frac{\alpha}{2}, n_2-1, n_1-1}$

Tamaños de muestra

Tamaño de muestra	finita	infinita
media	$n = \frac{Z^2 \sigma^2}{e^2}$	$n = \frac{NZ^2 \sigma^2}{(N-1)e^2 + Z^2 \sigma^2}$
Proporción	$n = \frac{Z^2 pq}{e^2}$	$n = \frac{NZ^2 pq}{(N-1)e^2 + Z^2 pq}$