



Poblacionales

Muestrales

$$\begin{aligned} \mu &= E(x) \rightarrow \text{Media poblacional} & \mu_{\bar{x}} &= E(\bar{x}) \rightarrow \text{Medias muestrales} \\ \sigma & & \mu_{y_n} &= E(y_n) \rightarrow \text{Media total muestral} \\ \sigma^2 &= V(x) & \sigma_{\bar{x}}^2 &= V(\bar{x}) \rightarrow \text{Varianza muestral} \\ & & \sigma_{y_n}^2 &= V(y_n) \\ & & \sigma_{\bar{x}} & \rightarrow \text{Desviación muestral} \\ & & \sigma_{y_n} & \end{aligned}$$

Promedio

$$\begin{aligned} \mu_{\bar{x}} &= \mu \\ \sigma_{\bar{x}}^2 &= \frac{\sigma^2}{n} \end{aligned}$$

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

$$z = \frac{\bar{x} - \mu_{\bar{x}}}{\sigma_{\bar{x}}}$$

total

$$\begin{aligned} \mu_{y_n} &= n \cdot \mu \\ V_{y_n} &= n \cdot \sigma^2 \\ \sigma_{y_n} &= \sqrt{n} \cdot \sigma \end{aligned}$$

$$z = \frac{y_n - \mu_{y_n}}{\sigma_{y_n}}$$