

**MATERIA:**

**ESTADISTICA INFERENCIAL**

**LICENCIATURA EN PSICOLOGIA**

**DOCENTE:**

**LIC. MAGNER JOEL HERRERA**

**ACTIVIDAD:**

**POBLACION INFINITA Y POBLACION FINITA**

**PRESENTA:**

**LEONEL LOPEZ MORALES**

**“4: CUATRIMESTRE**

**GRUPO: A**

**FRONTERA COMALAPA, CHIAPAS: 06/12/2020**

Formula:  $n = (z)^2 * P * Q$

Datos:

$$z = 95\% = 1.96$$

$$E = 5\% = 0.05$$

$$P = 2\% = 0.02$$

$$Q = 1 - P = 1 - 0.02 = 0.98$$

$$n = \frac{(1.96)^2 * 0.02 * 0.98}{(0.05)^2}$$

$$n = \frac{3.8416 * 0.02 * 0.98}{0.0025}$$

$$n = \frac{0.0752}{0.0025} = 30.08 = 30$$

Datos:

$$Z = 99\% = 2.575$$

$$E = 11\% = 0.11$$

$$P = 0.5$$

$$Q = 1 - P = 1 - 0.5 = 0.5$$

$$n = \frac{(2.575)^2 \cdot 0.5 \cdot 0.5}{(0.11)^2}$$

$$n = \frac{6.6306 \cdot 0.5 \cdot 0.5}{0.0121}$$

$$n = \frac{1.6576}{0.0121} = 136.99 = \underline{137} //$$

For hold:  $n = \frac{N * (Z)^2 * P * Q}{(N-1) * (E)^2 + (Z)^2 * P * Q}$

DATOS

$$N = 1.346$$

$$Z = 97\% = 2.17$$

$$E = 85\% = 0.085$$

$$P = 31\% = 0.31$$

$$Q = 1 - P = 1 - 0.31 = 0.69$$

$$n = \frac{1346 * (2.17)^2 * 0.31 * 0.69}{(1346 - 1) * (0.085)^2 + (2.17)^2 * 0.31 * 0.69}$$

$$n = \frac{1346 * 4.7089 * 0.31 * 0.69}{11339 * 0.0072 + 4.7089 * 0.31 * 0.69}$$

$$n = \frac{1349.6931}{9.6408 + 1.0072}$$

$$n = \frac{1349.6931}{10.648} = 126.7555 = \underline{\underline{127}}$$

Datos

$$N = 2,720$$

$$Z = 96\% = 2.05$$

$$e = 4\% = 0.04$$

$$p = 58\% = 0.58$$

$$q = 1 - p = 1 - 0.58 = 0.42$$

$$n = \frac{2,720 * (2.05)^2 * 0.58 * 0.42}{(2,720 - 1) * (0.04)^2 + (2.05)^2 * 0.58 * 0.42}$$

$$n = \frac{2,720 * 4.2025 * 0.58 * 0.42}{2,719 * 0.0016 + 4.2025 * 0.58 * 0.42}$$

$$n = \frac{2,784,5428}{4,3504 + 1,0237}$$

$$n = \frac{2,784,5428}{5,3741} = 518.1412 = 518$$

