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Actividad: Intervalo de Confianza para proporciones

Materia: Estadística inferencial

PASIÓN POR EDUCAR

Grado: 4° Cuatrimestre/ LPS

Grupo: "A"

Frontera Comalapa Chiapas a 17 de octubre de 2021.

EJERCICIO 1

INTERVALO DE CONFIANZA PARA PROPORCIONES

$$N=500$$

$$Z=900\%=1.645$$

$$P=300/500=0.6$$

$$Q=1-0.6=0.4$$

$$C=Z = 57.81\% \text{ a } 62.19$$

$$IC = 0.6 \pm 1.645 \left[\frac{(0.6)(0.4)}{500} \right]$$

$$IC = 0.6 \pm 1.645 \left[\frac{0.24}{500} \right]$$

$$IC = 0.6 \pm 1.645 [0.0219]$$

$$IC = 0.6 \pm 0.0219$$

$$IC = 0.6 + 0.0219 = 0.6219 = 62.19\%$$

$$IC = 0.6 - 0.0219 = 0.5781 = 57.81\%$$

$$\text{Respuesta} = 57.81\% \text{ a } 62.19\%$$

EJERCICIO 2

$$N = 1024$$

$$Z = 99\% = 2.575$$

$$P = 80\% = 0.80$$

$$Q = 1 - 0.80 = 0.2$$

$$IC = ? =$$

$$IC = P \pm \frac{\sqrt{PQ}}{N} \text{ DONDE}$$
$$IC = 0.80 \pm 2.575 \sqrt{(0.8)(0.2)}$$
$$-1024$$

$$IC = 0.80 \pm 2.575 \sqrt{\frac{0.16}{1024}}$$

$$IC = 0.80 \pm 2.275 (0.0125)$$

$$IC = 0.8 \pm 0.0284$$

$$IC = 0.8 - 0.0284 = 0.7716 = 77.16\%$$

$$IC = 0.8 + 0.0284 = 0.8284 = 82.84\%$$

$$IC = 77.16\% \text{ a } 82.84\%$$