



NOMBRE DEL MAESTRO: CERLOS
BERMUDEZ

NOMBRE DEL ALUMNO: XIMENA VELASCO
GARCIA

MATERIA: ESTADISTICA INFERENCIAL

$$N = 5000$$

$$P = 50\% = 0.5$$

$$q = 1 - P = 1 - 0.5 = 0.5$$

$$B = 4\% = 0.04$$

$$n = 556$$

$$D = \frac{B^2}{M} = \frac{(0.04)^2}{M} = 0.0004$$

$$n = \frac{NPq}{(N-1)DPq}$$

$$n = \frac{5000(0.5)(0.5)}{(4999)(0.0004 + 0.5(0.5))}$$

$$n = \frac{1250}{1.9996 + 0.25} = \frac{1250}{2.2446}$$

$$n = 555.63$$

$$n = 556$$

~~04-october 2022~~
~~1000~~

$$N = 6500$$

$$P = 72\% = 0.72$$

$$q = 1 - P = 1 - 0.72 = 0.28$$

$$B = 3\% = 0.03$$

$$n = 308$$

$$D = \frac{B^2}{M} = \frac{(0.03)^2}{M} = 0.000625$$

$$n = \frac{NPq}{(N-1)DPq} = \frac{6500(0.72)(0.28)}{(6500-1)(0.000625 + 0.72(0.28))}$$

$$n = \frac{1310.4}{4.263475} = 307.35$$

$$N = 7000$$

$$P = 52\% = 0.52$$

$$q = 1 - P = 0.48$$

$$B = 2\% = 0.02$$

$$n = 1846$$

$$D = \frac{(0.02)^2}{M} = 0.0001$$

$$n = \frac{7000(0.52)(0.48)}{6999(0.0001) + 0.52(0.48)} = \frac{1747.2}{0.7495}$$

$$N = 6300$$

$$P = 65\% = 0.65$$

$$q = 0.45$$

$$B = 1\% = 0.01$$

$$N = 3850$$

$$D = \frac{(0.01)^2}{M} = 0.000025$$

$$n = \frac{6300(0.65)(0.45)}{6299(0.000025) + 0.65(0.45)} = \frac{1554.25}{0.404975}$$