



PASIÓN POR EDUCAR

**Nombre de alumno: Felipe de Jesús López Avendaño.**

**Nombre del profesor: Jorge Enrique Albores Aguilar.**

**Nombre del trabajo: Ejercicios.**

**Materia: Estadística Inferencial en Nutrición.**

**Grado: Cuarto cuatrimestre.**

**Grupo: Nutrición "A"**

1-

$$N = 15000$$

$$B = 1000$$

$$S^2 = 950$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1000)^2}{4(15000)^2} = 0.001$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(15000)(950)}{(14999)(0.001) + (950)}$$

$$n = 14,767 //$$

2-

$$N = 22000$$

$$B = 975$$

$$S^2 = 950$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(975)^2}{4(22000)^2} = 0.000491$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(22000)(950)}{(21999)(0.000491) + (950)}$$

$$n = 21,753 //$$

3-

$$N = 32000$$

$$B = 1500$$

$$S^2 = 1300$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1500)^2}{4(32000)^2} = 0.000549$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(32000)(1300)}{(31999)(0.000549) + (1300)}$$

$$n = 31,574 //$$

4-

$$N = 12500$$

$$B = 1250$$

$$S^2 = 1200$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1250)^2}{4(12500)^2} = 0.0025$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(12500)(1200)}{(12499)(0.0025) + (1200)}$$

$$n = 12,183 //$$

$$5 =$$
$$N = 20000$$

$$B = 800$$

$$S = 75$$

$$n =$$

$$D = \frac{B^2}{4N^2} = \frac{(800)^2}{4(20000)^2} = 0.0004$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(20000)(75)^2}{(19999)(0.0004) + (75)^2}$$

$$n = 19,720 //$$

$$6 =$$
$$N = 17500$$

$$B = 1600$$

$$S = 150$$

$$n =$$

$$D = \frac{B^2}{4N^2} = \frac{(1600)^2}{4(17500)^2} = 0.00208$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(17500)(150)^2}{(17499)(0.00208) + (150)^2}$$

$$n = 17,472 //$$

$$7 =$$
$$N = 1800$$

$$B = 1000$$

$$S = 25$$

$$n =$$

$$D = \frac{B^2}{4N^2} = \frac{(1000)^2}{4(1800)^2} = 0.0771$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(1800)(25)^2}{(1799)(0.0771) + (25)^2}$$

$$n = 1,473 //$$

$$8 =$$
$$N = 14500$$

$$B = 1000$$

$$S^2 = 1000$$

$$n =$$

$$D = \frac{B^2}{4N^2} = \frac{(1000)^2}{4(14500)^2} = 0.00118$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(14500)(1000)}{(14499)(0.00118) + (1000)}$$

$$n = 14,256 //$$



9-

$$N = 21000$$

$$B = 1500$$

$$S = 100$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1500)^2}{4(21000)^2} = 0.00127$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(21000)(100)^2}{(20999)(0.00127) + (100)^2} \quad n = \underline{20,945} //$$

10-

$$N = 21000$$

$$B = 1000$$

$$S^2 = 1000$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1000)^2}{4(21000)^2} = 0.000566$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(21000)(1000)}{(20999)(0.000566) + (1000)}$$

$$n = \underline{20,754} //$$

11-

$$N = 15500$$

$$B = 1000$$

$$S = 950$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1000)^2}{4(15500)^2} = 0.0000104$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(15500)(950)^2}{(15499)(0.0000104) + (950)^2}$$

$$n = \underline{15500} //$$

12-

$$N = 13000$$

$$B = 1100$$

$$S^2 = 1050$$

n =

$$D = \frac{B^2}{4N^2} = \frac{(1100)^2}{4(13000)^2} = 0.00178$$

$$n = \frac{NS^2}{(N-1)D + S^2}$$

$$n = \frac{(13000)(1050)}{(12999)(0.00178) + (1050)}$$

$$n = \underline{12,720} //$$

