

CARLOS E. GUILLÉN BOLAÑOS

$$1. N = 55,000$$

$$P = 0.5$$

$$q = 1 - .5 = 0.5$$

$$B = 4\% = .04$$

$$D = \frac{(.04)^2}{4} = .0004$$

$$n = \frac{(55,000)(.5)(.5)}{(.0004) + (.5)(.5)} =$$

$$n = 13,750$$

$$2. N = 500$$

$$P = 72\% = .72$$

$$q = 1 - .72 = .28$$

$$B = 5\% = .05$$

$$D = \frac{(.05)^2}{4} = .000625$$

$$n = \frac{(500)(.72)(.28)}{(.000625) + (.72)(.28)} =$$

$$n = 197$$

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$$N = 60,000$$

$$P = 66\% = .66$$

$$q = 1 - .66 = .34$$

$$B = 4\% = .04$$

$$D = \frac{(.04)^2}{4} = .0004$$

$$n = \frac{(60,000)(.66)(.34)}{(.0004) + (.66)(.34)} =$$

$$n = 556$$

$$N = 25,000$$

$$P = 75 = .75$$

$$q = 1 - .75 = .25$$

$$B = 2\% = .02$$

$$D = \frac{(.02)^2}{4} = .0001$$

$$n = \frac{(25,000)(.75)(.25)}{(.0001) + (.75)(.25)} =$$

$$n = 1,745$$

CARLOS E. GUILLEN BOLANOS

$$N = 11,000$$

$$P = .5$$

$$q = 1 - .5 = .5$$

$$B = 5\% = .05$$

$$D = \frac{(.05)^2}{4} = .000625$$

$$n = \frac{(11,000)(.5)(.5)}{(10,999)(.000625) + (.5)(.5)} =$$

$$n = \underline{\underline{386}}$$

$$N = 16,000$$

$$P = 66\% = .66$$

$$q = 1 - .66 = .34$$

$$B = 4\% = .04$$

$$D = \frac{(.04)^2}{4} = .0004$$

$$n = \frac{(16,000)(.66)(.34)}{(15,999)(.0004) + (.66)(.34)} =$$

$$n = \underline{\underline{542}}$$