

Estimation of sample size

Formula:

$$\text{Estimated sample size} = \frac{z^2 * p(1-p)}{\varepsilon^2}$$

z = confidence level

p = sample proportion

ε = margin of error

Version 1: Estimated sample size = 385

- $z = 1.96$
- $p = 0.5$
- $\varepsilon = 0.05$

Version 2: Estimated sample size = 273

- $z = 1.65$
- $p = 0.5$
- $\varepsilon = 0.05$

Version 3: Estimated sample size = 97

- $z = 1.96$
- $p = 0.5$
- $\varepsilon = 0.10$

Version 4: Estimated sample size = 69

- $z = 1.65$
- $p = 0.5$
- $\varepsilon = 0.10$

Average of all versions: Estimated sample size = 206