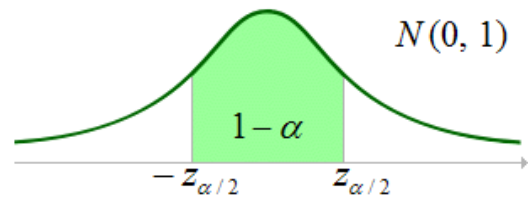


Mean of population

(known population variance)

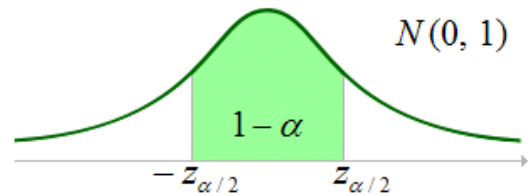
$$\mu \in \left(\bar{x} - z_{\frac{\alpha}{2}} \frac{\sigma}{\sqrt{n}}, \bar{x} + z_{\frac{\alpha}{2}} \frac{\sigma}{\sqrt{n}} \right)$$



Ratio of population

$$p \in \left(\hat{p} - z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}, \hat{p} + z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right)$$

$$\hat{q} = 1 - \hat{p}$$



- μ Mean of the population
- \bar{x} Mean of the sample
- σ Standard deviation of the population
- p Ratio of the population
- \hat{p} Ratio of the sample
- n Sample size
- α Significance level
- $1 - \alpha$ Confidence level
- $z_{\frac{\alpha}{2}}$ Percentage point of the Normal distribution with an upper cumulative probability of $\frac{\alpha}{2}$