

M358K: October 13th, 2021.

Confidence Intervals [review].

The general structure:

point estimate \pm margin of error

In our current normal model, the standard deviation σ is assumed to be known; the parameter of interest is the unknown population mean μ .

C... confidence level

$$\bar{x} \pm z^* \cdot \frac{\sigma}{\sqrt{n}}$$

$z^* = \Phi^{-1}\left(\frac{1+C}{2}\right)$
 q_{norm}