

Z-score :

How many standard Deviations away a datapoint is from the mean.

$$z = \frac{x - \mu}{\sigma}$$

Confidence Interval :

$$C.I. : \bar{x} \pm z \cdot \sigma_{\bar{x}}$$

\bar{x} = Sample mean

z = Z score associated with a confidence level

$\sigma_{\bar{x}}$ = standard error

$z \cdot \sigma_{\bar{x}}$ = margin of error (M.O.E)
