σ = Standard deviation

$\bar{x}$ = sample mean

μ = population mean

n = sample

$$z = \frac{\bar{x} - \mu}{\left(\frac{\sigma}{\sqrt{n}}\right)}$$

margin of error = z score × Standard error

Standard Error = $\frac{\sigma}{\sqrt{n}}$

α = alpha Levels

	1 Tail	2 Tail
α = .05	→ 1,65	1.96
α = .01	→ 2,32	2.57
α = .001	→ 3,08	3.27

H_0 (Null Hypothesis) : $\mu = \mu_I$

H_a (alternate Hypothesis) : $\mu < \mu_I$

$\mu > \mu_I$

$\mu \neq \mu_I$