**Critical value method:**

* Calculate the value of Zc from the given value of α (significance level)
* Calculate the critical values (UCV and LCV) from the value of Zc
* Make the decision on the basis of the value of the sample mean ¯x with respect to the critical values (UCV AND LCV)

**CV = μ ± Zc x (σ/​√N​)**

* *μ* 🡪 *Given population mean*
* Zc 🡪 From table
* σ 🡪 Sample Deviation
* N 🡪 Sample size

**P- value method:**

* Calculate the value of the Z-score for the sample mean point of the distribution.
* Calculate the p-value from the cumulative probability of the given Z-score using the Z-table.
* Make a decision on the basis of the p-value with respect to the given value of α (significance level).

**Zc = (¯x​ - μ) / (σ /​√N​)**

* ¯x 🡪 Sample mean
* *μ* 🡪 *Given population mean*
* σ 🡪 Sample Deviation if P< sign. level; reject null hypothesis
* N 🡪 Sample size

