Glossary

.

1. Population
A population is any entire collection of people, animals, plants or things from which we may collect data. It is the entire group we are interested in, which we wish to describe or draw conclusions about.

2. Estimation
The process by which sample data are used to indicate the value of an unknown quantity in a population.

3. Point Estimate
A point estimate of a population parameter is a single value of a statistic.

4. Interval Estimate
An interval estimate is defined by two numbers, between which a population parameter is said to lie.

5. Consistent Estimates
Method of estimation is called consistent if the estimate becomes exactly equal to the population value.

6. Mu (μ)
Usually mu is the symbol for the mean of a probability distribution. It is sometimes used as the average of a dataset (also called the mean of the dataset).

7. Sigma (σ)
In statistics and probability theory, standard deviation shows how much variation or "dispersion" exists from the average (mean, or expected value).

8. Biased Estimate
In statistics, the bias (or bias function) of an estimator is the difference between this estimator's expected value and the true value of the parameter being estimated.

9. Unbiased Estimate
An estimator or decision rule with zero bias is called unbiased.

10. Median
In statistics and probability theory, median is described as the numerical value separating the higher half of a sample, a population, or a probability distribution, from the lower half.

11. Population Mean
Mean is the central tendency of a collection of numbers taken as the sum of the numbers divided by the size of the population.

12. Confidence Interval
Statisticians use a confidence interval to express the precision and uncertainty associated with a particular sampling method.

13. Confidence Level
The probability part of a confidence interval is called a confidence level.

14. Margin of Error
In a confidence interval, the range of values above and below the sample statistic is called the margin of error.

15. Maximum Error of the Estimate
The maximum error of the estimate is denoted by E and is one-half the width of the confidence interval. The basic confidence interval for a symmetric distribution is set up to be the point estimate minus the maximum error of the estimate is less than the true population parameter which is less than the point estimate plus the maximum error of the estimate.