

Glossary

1. **Confidence Interval**

A Confidence Interval (CI) is a kind of interval estimate of a population parameter and is used to indicate the reliability of an estimate.

2. **Erroneous**

Based on or containing error; mistaken; incorrect.

3. **Estimator**

An estimator is a rule for calculating an estimate of a given quantity based on observed data. Thus, the rule and its result (the estimate) are distinguished.

4. **Interval Estimation**

Interval estimation is the use of sample data to calculate an interval of possible (or probable) values of an unknown population parameter, in contrast to point estimation, which is a single number.

5. **Parameters**

A parameter is a quantity that serves to relate functions and variables using a common variable when such a relationship would be difficult to explicate with an equation.

6. **Pessimistic**

Pertaining to or characterized by pessimism.

7. **Point Estimation**

Point estimation involves the use of sample data to calculate a single value (known as a statistic) which is to serve as a "best guess" or "best estimate" of an unknown (fixed or random) population parameter.

8. **Population Mean**

Population mean collects the data and sum all the values in the population and divide the sum by the number of elements in the population.

9. **Population Parameter**

Population Parameter is a quantity or statistical measure that is fixed for a given population and that is used as the value of a variable in some general distribution or frequency function to make it descriptive of that population.

10. **Random Sample**

In statistical terms a random sample is a set of items that have been drawn from a population in such a way that each time an item was selected, every item in the population had an equal opportunity to appear in the sample.

11. **Robust Statistics**

Robust statistics provides an alternative approach to standard statistical methods, such as those for estimating location, scale and regression parameters.

12. **Sigma**

Sigma is denoted as σ . Lower case sigma (σ) is used for the standard deviation of a population or probability distribution in statistics.

13. **Statistical Inference**

Statistical inference is the process of drawing conclusions from data subject to random variation, for example, observational errors or sampling variation.

14. **Unwittingly**

Unwittingly means not knowing or unaware.

15. **Variance**

Variance is a measure of how far a set of numbers is spread out. It is one of several descriptors of a probability distribution, describing how far the numbers lie from the mean (expected value).