<u>Glossary</u>

1. Curve

The graph of the solutions to any equation of two variables.

2. Distribution

A set of numbers and their frequency of occurrence collected from measurements over a statistical population.

3. Expectation

The expected value of a random variable.

4. Integral

It is the limit of an increasingly large number of increasingly smaller quantities, related to the function that is being integrated (the integrand).

5. Kurtosis

The general form or a quantity indicative of the general form of a statistical frequency curve near the mean of the distribution.

6. Mean

A number that typifies a set of numbers, such as a geometric mean or an arithmetic mean.

7. Moment

The expected value of a positive integral power of a random variable. The first moment is the mean of the distribution.

8. Moment Generating Function

In probability theory and <u>statistics</u>, the moment-generating function of any random variable is an alternative definition of its <u>probability distribution</u>. Thus, it provides the basis of an alternative route to analytical results compared with working directly with <u>probability density functions</u> or <u>cumulative distribution functions</u>.

9. Parameter

A quantity, such as a mean, that is calculated from data and describes a population.

10. Population

The set of individuals, items, or data from which a statistical sample is taken.

11. Probability

A number expressing the likelihood of the occurrence of a given event, especially a fraction expressing how many times the event will happen in a given number of tests or experiments.

12. Skew

Not symmetrical about the mean.

13. Symmetry

Relating to or exhibiting symmetry.

14. Variable

A quantity capable of assuming any of a set of values.

15. Variance

The square of the standard deviation.