Glossary

1. Air current

Air moving from an area of high pressure to an area of low pressure.

2. Astronomy

The scientific study of matter in outer space, especially the positions, dimensions, distribution, motion, composition, energy, and evolution of celestial bodies and phenomena.

3. Convergence

The property or manner of approaching a limit, such as a point, line, function, or value.

4. Cumulative Distribution Function

A function defined on the sample space of a distribution and taking as its value at each point the probability that the random variable has that value or less.

5. **Curve**

A continuously bending line that has no straight parts.

6. Elasticity

The property of returning to an initial form or state following deformation.

7. Empirical Frequency

The number of times an outcome has been observed to occur during repeated trials of an experiment.

8. Estimator

A derived random variable that generates estimates of a parameter of a given distribution, such as \bar{X} , the mean of a number of identically distributed random variables Xi. If \bar{X} is unbiased, \bar{x} , the observed value should be close to E(Xi).

9. Fluctuation

To vary irregularly.

10. Histogram

A diagram consisting of rectangles whose area is proportional to the frequency of a variable and whose width is equal to the class interval.

11. Normal Distribution

A function that represents the distribution of many random variables as a symmetrical bell-shaped graph

12. Population

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

13. Random Variable

A variable whose values are random but whose statistical distribution is known.

14. Stochastic

Involving or containing a random variable or variables.

15. Vibration

A rapid linear motion of a particle or of an elastic solid about an equilibrium position.