<u>Glossary</u>

1. Data

Data are values of qualitative or quantitative variables, belonging to a set of items

2. Curve

In mathematics, a curve is, generally speaking, an object similar to a line but which is not required to be straight.

3. Curve Fitting

Curve fitting is the process of constructing a curve, or mathematical function that has the best fit to a series of data points, possibly subject to constraints.

4. Least squares

A method of estimating a quantity or fitting a graph to data so as to minimize the sum of the squares of the differences between the observed values and the estimated values

5. Linear equation

An equation between two variables that gives a straight line when plotted on a graph

6. Non-linear system

In mathematics, a nonlinear system is a system which is not linear, that is, a system which does not satisfy the superposition principle, or whose output is not directly proportional to its input

7. Non-linear equation

An equation that is not linear.

8. Simultaneous equation

In mathematics, simultaneous equations are a set of equations containing multiple variables.

9. Log

A quantity representing the power to which a fixed number (the base) must be raised to produce a given number

10. Antilog

The number to which a logarithm belongs

11. Estimate

Estimation is the calculated approximation of a result which is usable even if input data may be incomplete or uncertain.

12. Constant

In mathematics, a constant is a non-varying value, i.e. completely fixed or fixed in the context of use.

13. Cramer's rule

In linear algebra, Cramer's rule is a theorem, which gives an expression for the solution of a system of linear equations with as many equations as unknowns, valid in those cases where there is a unique solution.

14. Determinant

an array of elements written as a square, and denoted by two vertical lines enclosing the array.

15. Sigma/ **Summation** Mathematical sum