[Glossary]
[Elementary Difference Equations &Their   Applications to Economics]

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                                   Advanced Mathematical

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                                  Difference Equations

Lecture No. & Title: 1:

                                  Elementary Difference Equations
                                  &Their Applications to Economics

Glossary

- **complementary function:** The solution to the related homogenous equation for a non-homogenous equation

- **differential equation:** An equation with one or more derivatives in it.

- **domain:** a solution of differential equation is a function $y=(x)y$ which, when substituted along with its derivative among the differential equation satisfies the equation from all x in some specified interval.

- **first order equation:** Any equation with a first derivative in it, but no higher derivatives.

- **non homogenous equation:** Any equation that is not equal to 0. In differential equations, its an equation , where $f(x)$ is not 0.

- **ordinary differential equation:** The *ordinary differential equations* are those having only one independent variable and its derivatives.

- **partial differential equation:** Any differential equation that has partial derivatives in it

- **particular solution:** A solution to a differential equation with all constants evaluated

- **second order equation:** Any equation with a second derivative in it, but no higher derivatives.

- **separable equation:** An equation where the x and y terms are multiplied and not added.

- **substitution method:** A method of turning a non-separable equation into a separable one.