

Chapters include: Basic Concepts • Classifications of First-Order Differential Equations • Separable First-Order Differential Equations • Exact First-Order Differential Equations • Linear First-Order Differential Equations • Applications of First-Order Differential Equations • Linear Differential Equations: Theory of Solutions • Second-Order Linear Homogenous Differential Equations with Constant Coefficients • Nth-order Linear Homogenous Differential Equations with Constant Coefficients • The Method of Undetermined Coefficients • Variation of Parameters • Initial-Value Problems • Applications of Second-Order Linear Differential Equations • The Laplace Transform