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""Bibliography""""""Chapter 5: Partial differential equations""; ""5.1 Classical PDE problems""; ""5.2 Differential operators used for PDEs""; ""5.3 Some PDE in science and engineering""; ""5.4 Initial and boundary conditions for PDE""; ""5.5 Numerical solution of PDEs, some general comments""; ""Bibliography""; ""Chapter 6: Numerical Methods for Parabolic Partial Differential Equations""; ""6.1 Applications""; ""6.2 An introductory example of discretization""; ""6.3 THE METHOD OF LINES FOR PARABOLIC PDEs""; ""6.4 Generalizations of the heat equation"" ""6.5 Ansatz methods for the model equation""""""Bibliography""; ""Chapter 7: Numerical methods for elliptic partial differential equations""; ""7.1 Applications""; ""7.2 The finite difference method""; ""7.3 Discretization of a problem with different BCs""; ""7.4 ANSATZ Methods For Elliptic PDE""; ""Bibliography""; ""Chapter 8: Numerical methods for hyperbolic PDE""; ""8.1 Applications""; ""8.2 Numerical solution of hyperbolic PDE""; ""8.3 The Finite Volume Method""; ""8.4 Some examples of stability analysis for hyperbolic PDE""; ""Bibliography""
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""A.5 NUMERICAL SOLUTION OF ALGEBRAIC SYSTEMS OF EQUATIONS""