

- Part I Fundamentals of Finite-Difference Methods
- 1 Introduction
- 2 Partial Differential Equations
- 3 Basics of Finite-Difference Methods
- 4 Application of Finite-Difference Methods to Selected Model Equations
- Part 2 Application of Finite-Difference Methods to the Equations of Fluid Mechanics and Heat Transfer
- 5 Governing Equations of Fluid Mechanics and Heat Transfer
- 6 Numerical Methods for Inviscid Flow Equations
- 7 Numerical Methods for Boundary-Layer Type Equations
- 8 Numerical Methods for the "Parabolized" Navier-Stokes Equations
- 9 Numerical Methods for the Navier-Stokes Equations
- 10 Grid Generation
- Appendix A
- Appendix B
- Appendix C
- Nomenclature
- References
- Index