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6.7 Mathematica ProgramExercises; 7 Polytopes and Polyhedra; 7.1 Introduction; 7.2 Polytopes; 7.3 Polyhedra; Exercises; 8 Cones and Systems of Inequalities; 8.1 Introduction; 8.2 A Discussion of Linear Systems; 8.3 Solving Linear Systems; 8.4 Applications to Linear Programming; Exercises; Part III Linear Programming; 9 An Introduction to Linear Programming; 9.1 Introduction; 9.2 Problem Statement and Basic Definitions; 9.3 Linear Programming Problem in Standard Form; 9.4 Basic Solutions; 9.5 Duality; Exercises; 10 The Exterior Point Method; 10.1 Introduction; 10.2 The Exterior Point Method
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Sommario/riassunto

A unique, applied approach to problem solving in linear algebraDeparting from the standard methods of analysis, this unique book presents methodologies and algorithms based on the concept of orthogonality and demonstrates their application to both standard and novel problems in linear algebra. Covering basic theory of linear systems, linear inequalities, and linear programming, it focuses on elegant, computationally simple solutions to real-world physical, economic, and engineering problems. The authors clearly explain the reasons behind the analysis of different structures and concept