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Augmenting Path Algorithm 5. The Transportation Problem: A Primal-dual Algorithm ; Primal-dual Algorithm for the Transportation Problem ; Minimum-cost Path Augmentation Algorithm ; 6. A Primal Simplex Algorithm for Network Flow Problems ; 7. Notes ; Section I.3.1 ; Section I.3.2 ; Section I.3.3 ; Section I.3.4 ; Section I.3.5 ; Section I.3.6 ; I.4: Polyhedral Theory ; 1. Introduction and Elementary Linear Algebra ; 2. Definitions of Polyhedra and Dimension ; 3. Describing Polyhedra by Facets ; 4. Describing Polyhedra by Extreme Points and Extreme Rays ; 5. Polarity
6. Polyhedral Ties Between Linear and Integer Programs 7. Notes ; Sections I.4.1-I.4.4 ; Section I.4.5 ; Section I.4.6 ; 8. Exercises ; 1.5: Computational Complexity ; 1. Introduction ; 2. Measuring Algorithm Efficiency and Problem Complexity ; 3. Some Problems Solvable in Polynomial Time ; 4. Remarks on 0-1 and Pure-integer Programming ; 5. Nondeterministic Polynomial-time Algorithms and Np Problems ; Certificates of Feasibility, the Class Np, and Nondeterministic Algorithms ; 6. The Most Difficult Np Problems: the Class Np ; 7. Complexity and Polyhedra ; 8. Notes ; Sections I.5.1 and I.5.2
Section I.5.3

Sommario/riassunto

Rave reviews for INTEGER AND COMBINATORIAL OPTIMIZATION""This book provides an excellent introduction and survey of traditional fields of combinatorial optimization . . . It is indeed one of the best and most complete texts on combinatorial optimization . . . available. [And] with more than 700 entries, [it] has quite an exhaustive reference list.""-Optima""A unifying approach to optimization problems is to formulate them like linear programming problems, while restricting some or all of the variables to the integers. This book is an encyclopedic resource for such formulations, as well as for