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| Titolo                  | An Economic Interpretation of Linear Programming // by Quirino Paris  |
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| ISBN                    | 9781137573926<br>1137573929   |
| Edizione                | [1st ed. 2016.]   |
| Descrizione fisica      | 1 online resource (XIX, 454 p.)   |
| Disciplina              | 519.7/2   |
| Soggetti                | Econometrics<br>Software engineering<br>Quantitative Economics<br>Software Engineering  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Bibliographic Level Mode of Issuance: Monograph   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Introduction to linear programming -- Primal and dual LP problems -- Setting up lp problems -- The transportation and transshipment problems -- Spaces, cones, bases and extreme points -- Solving systems of equations -- Primal simplex algorithm : the price-taking firm -- The dual simplex algorithm -- Linear programming and the lagrangean function -- The artificial variable algorithm -- The artificial constraint algorithm -- The diet problem revisited -- Parametric programming: input demand functions -- Parametric programming: output supply functions -- Dealing with multiple optimal solutions -- Solid waste management -- The choice of techniques in a farm production model -- Cattle ranch management -- The measurement of technical and economic efficiency -- Decentralized economic planning -- Theorems of linear programming. |
| Sommario/riassunto      | This text covers the basic theory and computation for mathematical modeling in linear programming. It provides a strong background on how to set up mathematical proofs and high-level computation methods, and includes substantial background material and direction. Paris presents an intuitive and novel discussion of what it means to solve a system of equations that is a crucial stepping stone for solving   |

any linear program. The discussion of the simplex method for solving linear programs gives an economic interpretation to every step of the simplex algorithm. The text combines in a unique and novel way the microeconomics of production with the structure of linear programming to give students and scholars of economics a clear notion of what it means, formulating a model of economic equilibrium and the computation of opportunity cost in the presence of many outputs and inputs.

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