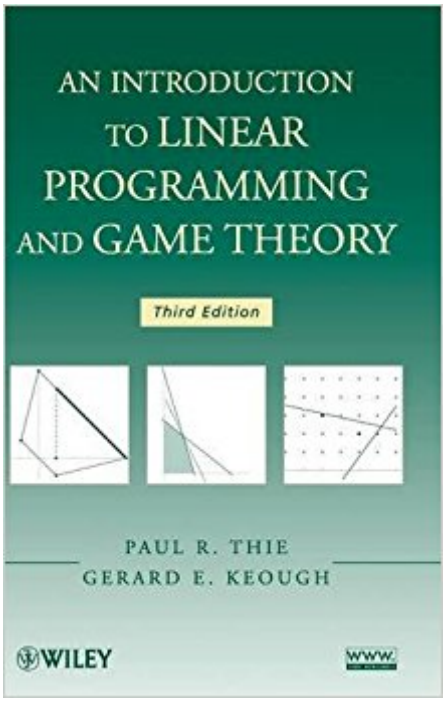
An Introduction To Linear Programming And Game Theory



Synopsis

Praise for the Second Edition: "This is quite a well-done book: very tightly organized, better-than-average exposition, and numerous examples, illustrations, and applications." â ”Mathematical Reviews of the American Mathematical Society An Introduction to Linear Programming and Game Theory, Third Edition presents a rigorous, yet accessible, introduction to the theoretical concepts and computational techniques of linear programming and game theory. Now with more extensive modeling exercises and detailed integer programming examples, this book uniquely illustrates how mathematics can be used in real-world applications in the social, life, and managerial sciences, providing readers with the opportunity to develop and apply their analytical abilities when solving realistic problems. This Third Edition addresses various new topics and improvements in the field of mathematical programming, and it also presents two software programs, LP Assistant and the Solver add-in for Microsoft Office Excel, for solving linear programming problems. LP Assistant, developed by coauthor Gerard Keough, allows readers to perform the basic steps of the algorithms provided in the book and is freely available via the book's related Web site. The use of the sensitivity analysis report and integer programming algorithm from the Solver add-in for Microsoft Office Excel is introduced so readers can solve the book's linear and integer programming problems. A detailed appendix contains instructions for the use of both applications. Additional features of the Third Edition include: A discussion of sensitivity analysis for the two-variable problem, along with new examples demonstrating integer programming, non-linear programming, and make vs. buy models Revised proofs and a discussion on the relevance and solution of the dual problem A section on developing an example in Data Envelopment Analysis An outline of the proof of John Nash's theorem on the existence of equilibrium strategy pairs for non-cooperative, non-zero-sum games Providing a complete mathematical development of all presented concepts and examples, Introduction to Linear Programming and Game Theory, Third Edition is an ideal text for linear programming and mathematical modeling courses at the upper-undergraduate and graduate levels. It also serves as a valuable reference for professionals who use game theory in business, economics, and management science.

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Customer Reviews

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PAUL R. THIE, PhD, is Professor Emeritus in the Department of Mathematics at Boston College. Dr. Thie has authored numerous journal articles in the areas of mathematical programming and several complex variables. GERARD E. KEOUGH, PhD, is Associate Professor and former chair of the Department of Mathematics at Boston College. He has written extensively on operator theory, functional analysis, and the use of technology in mathematics. Dr. Keough is the coauthor of Getting Started with Maple, Second Edition and Getting Started with Mathematica, Second Edition, both published by Wiley.

Very good book. Very thorough in its explanations. Good price.

After spending much of the summer reading and trying to learn linear programming on my own using this book, I feel that I’m qualified write this review.This book suffers from persistent disorganization which I suspect is due to pressure put on the author to reduce the number of pages in the book as much as possible. Consequently, formatting shortcuts are taken wherever possible. Some of these shortcuts do not seriously inhibit learning this material.But when one wishes to complete a problem which requires that you refer to a problem 2 chapters before; which requires that you refer to a problem one chapter before, and so on. And when a specific example refers to a problem two sections before, which refers to a table two sections before that, which...well you get the point. The reader is then required to focus more on what page what table is then on the material.The other major difficulties with this book arise from the authors lack of good punctuation and his lack of emphasis (through formatting on the page itself) of important points, often contained deep within examples. Most of the topics of the first 5 chapters are taught in the form of an example. And so a single sentence within a half-page paragraph of information that is critical to understanding the problem at hand ought to be emphasized some how. Some people prefer bold such things, others prefer to center. Dr Thie prefers to have you reread a huge paragraph of information on a page you can’t remember to find out if such and such number was required to be positive or negative.That’s my take. You get the picture. Don’t buy this book unless your prof makes you.

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the price Delivery soon, something good, have the effect. Very good seller. Thank you. My colleagues are very like. Oh come again next time Works great! Really high quality and excellent value I wish I found this earlier

The first part of this book is a good introduction to linear programming and the simplex method. Easy reading, tries to give insight, and with lots of examples. My personal favorite when it comes to refreshing my intuition on duality and how simplex works.Regarding the game theory material, it seems to be a little crowded. Don’t expect any in-depth coverage there, but as a brief overview it might be appropriate.

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