Operations Research: An Introduction (8th Edition)

Hamdy A. Taha
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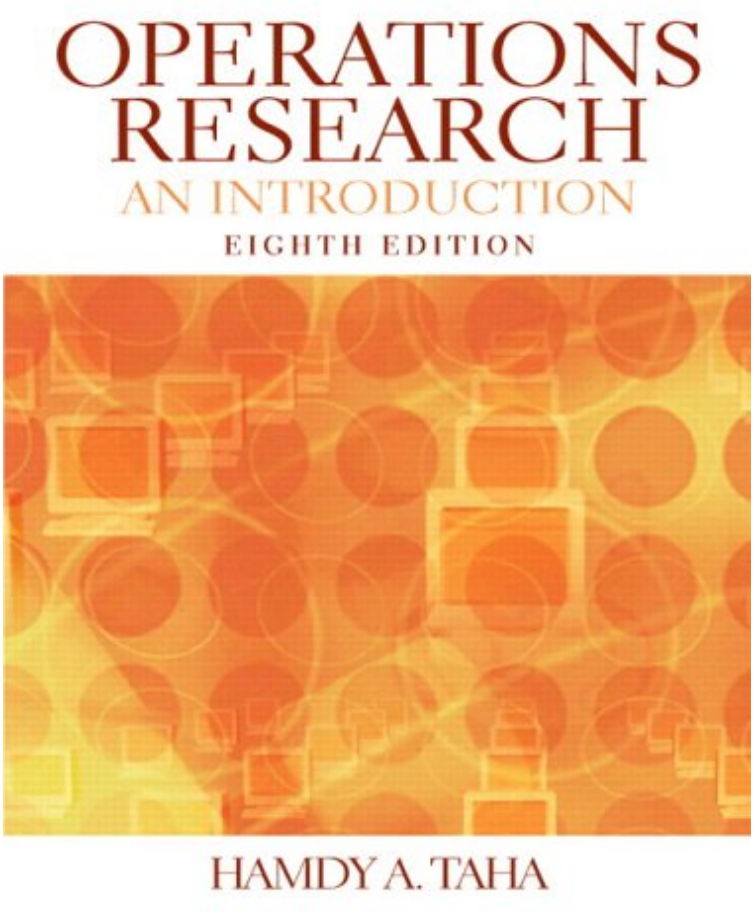

#1195372 in Books 2006-04-04Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 9.34 x 1.44 x 7.36l, 3.02 #File Name: 0131889230813 pages | File size: 71.Mb

Hamdy A. Taha : Operations Research: An Introduction (8th Edition) before purchasing it in order to gage whether or not it would be worth my time, and all praised Operations Research: An Introduction (8th Edition):

2 of 2 people found the following review helpful. Excellent TextbookBy Simple ToolsThis is an excellent textbook with clear and comprehensive explanations. TORA is a very effective supplemental learning tool that require minimal application training to start using. The material is presented using clear examples. The organization of the textbook is good, but can be further enhanced by moving all problems to the end of each chapter (instead of the end of each section of a chapter). Nevertheless, this is a very valuable book and a great introduction to OR.1 of 1 people found the following review helpful. Five StarsBy carlosvery useful for my class. clear to understand and follow.0 of 0 people found the following review helpful. Five StarsBy Senwan TKNice

Significantly revised, this book provides balanced coverage of the theory, applications, and computations of operations research. The applications and computations in operations research are emphasized. Significantly revised, this text streamlines the coverage of the theory, applications, and computations of operations research. Numerical examples are effectively used to explain complex mathematical concepts. A separate chapter of fully analyzed applications aptly demonstrates the diverse use of OR. The popular commercial and tutorial software AMPL, Excel, Excel Solver, and Tora are used throughout the book to solve practical problems and to test theoretical concepts. New materials include Markov chains, TSP heuristics, new LP models, and a totally new simplex-based approach to LP sensitivity analysis.

From the PublisherMajor revision is designed to meet the needs of beginning through advanced students with an emphasis placed on the formulation and applications aspects. Provides balanced coverage of theory, applications and computations of operations research techniques. Numerical examples are main vehicle for explaining new ideas with each numeric example followed by a set of problems. TORA and SIMNET software included in text. More than 1,000 problems.From the Back CoverOperations Research: An Introduction Eighth Edition Hamdy A. Taha This eighth edition streamlines the presentation of text material, providing a balanced coverage of the theory, applications, and computations of operations research. Complex mathematical concepts are explained by means of carefully designed examples. Practical applications are presented using multitudes of examples, targeted problems, fully developed case analyses, and case studies, all borrowed from situations published in the literature. Computations are supported throughout the text both at the commercial level (using AMPL, Solver, and Excel) and at the tutorial level (using the popular and user-friendly TORA). New Text Material: Chapter 2 is dedicated entirely to formulating linear programming models, with new applications in urban renewal, currency arbitrage, investments, production planning, and blending. New end-of-section problems deal with topics ranging from water quality management and traffic control to warfare. Chapter 3 presents the general LP sensitivity analysis, including dual prices and reduced costs, as a direct extension of the simplex tableau computations. Chapter 4 is now dedicated to LP post-optimal analysis based on duality. A combined nearest neighbor-reversal heuristic (with generic Excel implementation) is presented for the traveling salesperson problem in Chapter 9. Markov chains treatment has been expanded into a new Chapter 17. The totally new Chapter 24 on the CD presents 15 fully developed real-life applications with summaries given in pertinent chapters. The analysis, which often cuts across more than one OR technique (e.g., heuristics and LP, or ILP and queuing), deals with the modeling, data collection, and computational aspects of solving the problem (CD-ROM only). The new Appendix E on the CD includes approximately 50 mini cases of real-life situations. More than 1000 end-of-section problem are included in the book. Each chapter starts with a guide that facilitates the understanding of the material and the effective use of the accompanying software. All computer-related material has been deliberately compartmentalized in subsections to minimize disruptions in the main presentation of the book. New Software Implementations: AMPL, the widely-used commercial modeling language, is integrated throughout the book with examples from linear/nonlinear/integer programming and networks. The examples also demonstrate AMPLs superior interactive capabilities for model experimentation. To facilitate learning the language, AMPLs full syntax is given in Appendix A and cross-referenced in the book examples. Excel spreadsheet implementations include dynamic programming, traveling salesperson, inventory, AHP, Bayes probabilities, electronic statistical tables, queuing, simulation, Markov chains, and nonlinear programming. Interactive user input in some spreadsheets is designed to promote better understanding of the underlying techniques. The use of Excel Solver has been expanded, particularly in the areas of linear, network, integer, and nonlinear programming. TORA continues to play the key role of tutorial software. On the CD-ROM AMPL language (student version) with numerous fully developed models. TORA, the updated and easy-to-use tutorial optimization system. Numerous fully-developed AMPL models. General ready-to-use Excel spreadsheet templates. Numerous fully-developed Excel Solver models. Four supplemental chapters and two appendixes. Pearson Prentice Hall Upper Saddle River, NJ 07458 www.prenhall.com ISBN: 0-13-188923-0About the Author Hamdy A. Taha is a University Professor of Industrial Engineering with the University of Arkansas, where he teaches and conducts research in operations research and simulation. He is the author of three other books on integer programming and simulation, and his works have been translated into Chinese, Korean, Spanish, Japanese, Russian, Turkish, and Indonesian. He is also the author of several book chapters. His articles have appeared in Management Science, Operations Research, and Interfaces Institute for Operations Research and Management Science, Naval Research Logistics John Wiley Sons, the European Journal of Operations Research International Federation of Operations Research Societies and the AIIE Transactions. Professor Taha was named a Senior Fulbright Scholar to Carlos III University, Madrid, Spain. He received an Alumni Award for excellence in research and The Nadine Baum Faculty Teaching Award, both from the University of Arkansas, and numerous other research and teaching awards from the College of Engineering, University of Arkansas. He is fluent in three languages and has held positions in Mexico and the Middle East.