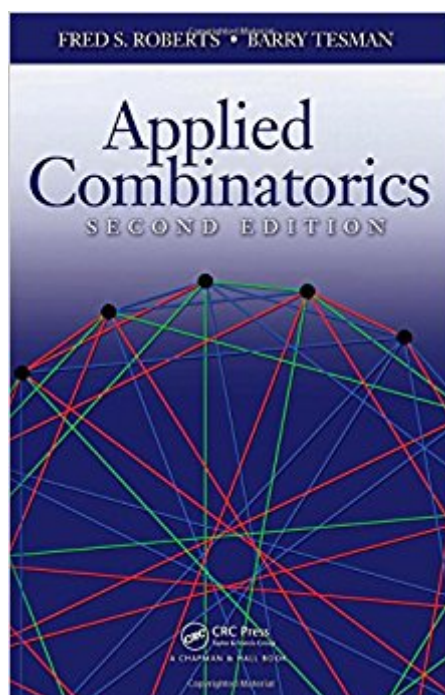The book was found

Applied Combinatorics, Second Edition

Synopsis

Now with solutions to selected problems, Applied Combinatorics, Second Edition presents the tools of combinatorics from an applied point of view. This bestselling textbook offers numerous references to the literature of combinatorics and its applications that enable readers to delve more deeply into the topics. After introducing fundamental counting rules and the tools of graph theory and relations, the authors focus on three basic problems of combinatorics: counting, existence, and optimization problems. They discuss advanced tools for dealing with the counting problem, including generating functions, recurrences, inclusion/exclusion, and PÃ lya theory. The text then covers combinatorial design, coding theory, and special problems in graph theory. It also illustrates the basic ideas of combinatorial optimization through a study of graphs and networks.

Book Information

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Average Customer Review: 4.2 out of 5 starsÂ Â See all reviewsÂ (16 customer reviews)

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Customer Reviews

This book offers a good mix of both theory and practice. Roberts does writes well the proofs, but doesn't get lost in the stratosphere of theory, instead coming down to Earth with a huge collection of applications. It has many good chapters in enumerative combinatorics, which are well written and offers an array of applications. These chapters teach how to count in a friendly way, and the students should enjoy them. For example, the topic on counting with repeated elements is very enjoyable. The chapter on Polya's Theory, which is a difficult subject is presented in a very ``user-friendly'' approach with intermediate applications, that allow the reader to understand more thoroughly the subject. This is just one of many examples of the good writing skills of Roberts. It

also has several chapters on graph theory, with an even greater emphasis on its applications. These chapters deal with the subject both from a mathematician point of view, with interesting theorems, and from the point of view of the computer scientist, with several graph algortihms. The chapter on networks and the Ford-Fulkerson algorithm and its applications is very well written. Also very good is the chapter on codes. Unfortunately it ties the Hadamard codes with a previous chapter on designs, when it can be covered with slight alterations independently. Another good interesting feature of the book is the bibliography, which invites further exploration of the topics. The exercises both complement the theory and show how it is applied. Furthermore, there are many examples of applications which ``continue'' from one chapter to another, exploring them from many different points of view.

Applied Combinatorics, Second Edition Applied Combinatorics Introductory Combinatorics (5th Edition) Additive Combinatorics (Cambridge Studies in Advanced Mathematics) A Path to Combinatorics for Undergraduates: Counting Strategies Schaum's Outline of Theory and Problems of Combinatorics including concepts of Graph Theory Principles and Techniques in Combinatorics Combinatorics: Topics, Techniques, Algorithms Combinatorial Optimization: Theory and Algorithms (Algorithms and Combinatorics) Counting: The Art of Enumerative Combinatorics (Undergraduate Texts in Mathematics) Geometric Algorithms and Combinatorial Optimization (Algorithms and Combinatorics) Algebra, Logic and Combinatorics (Ltcc Advanced Mathematics) Elena Bablenis Haveles BS Pharm Pharm D's Applied Pharmacology 6th (Sixth) edition(Applied Pharmacology for the Dental Hygienist [Paperback])(2010) Applied Biopharmaceutics & Pharmacokinetics, Sixth Edition (Shargel, Applied Biopharmaceuticals & Pharmacokinetics) Applied Cryptography: Protocols, Algorithms, and Source Code in C [APPLIED CRYPTOGRAPHY: PROTOCOLS, ALGORITHMS, AND SOURCE CODE IN C BY Schneier, Bruce (Author) Nov-01-1995 Applied Therapeutics: The Clinical Use of Drugs (APPLIED THERAPEUTICS (KODA-KIMBLE)) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Digital Signal Processing with Examples in MATLABÂ®, Second Edition (Electrical Engineering & Applied Signal Processing Series) Introduction to Information Theory and Data Compression, Second Edition (Applied Mathematics) Coding Theory and Cryptography: The Essentials, Second Edition (Chapman & Hall/CRC Pure and Applied Mathematics)