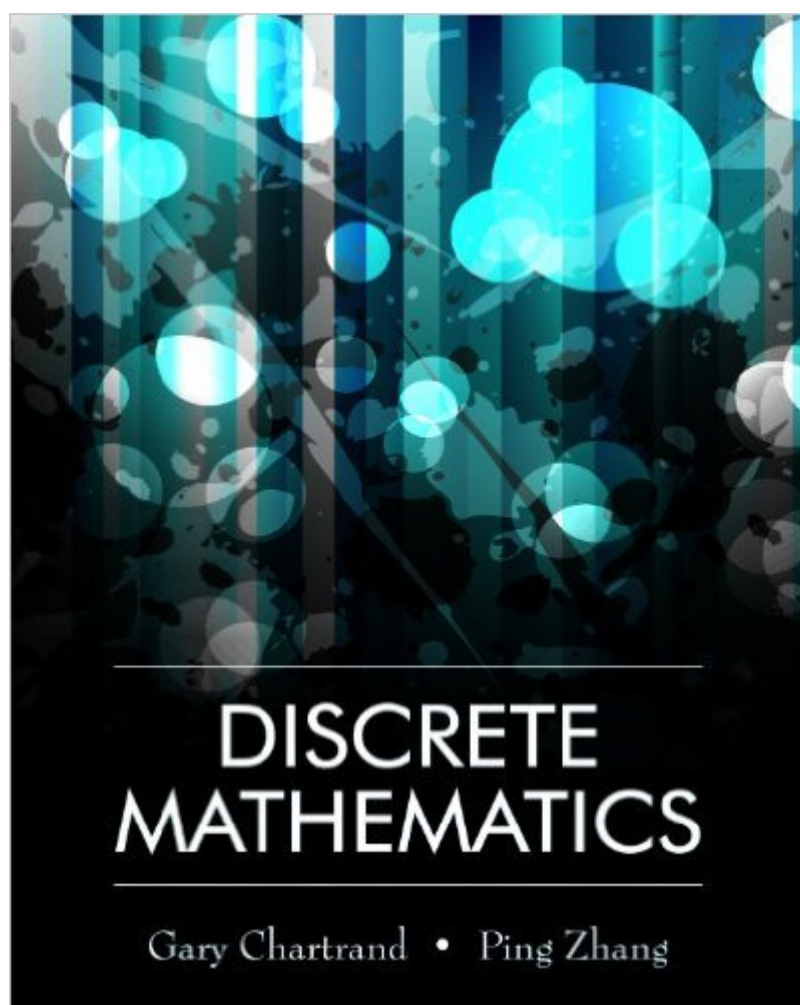# Discrete Mathematics

Synopsis

Chartrand and Zhangâ ™s Discrete Mathematics presents a clearly written, student-friendly introduction to discrete mathematics. The authors draw from their background as researchers and educators to offer lucid discussions and descriptions fundamental to the subject of discrete mathematics. Unique among discrete mathematics textbooks for its treatment of proof techniques and graph theory, topics discussed also include logic, relations and functions (especially equivalence relations and bijective functions), algorithms and analysis of algorithms, introduction to number theory, combinatorics (counting, the Pascal triangle, and the binomial theorem), discrete probability, partially ordered sets, lattices and Boolean algebras, cryptography, and finite-state machines. This highly versatile text provides mathematical background used in a wide variety of disciplines, including mathematics and mathematics education, computer science, biology, chemistry, engineering, communications, and business. Some of the major features and strengths of this textbook: numerous, carefully explained examples and applications facilitate learning; more than 1,600 exercises, ranging from elementary to challenging, are included with hints/answers to all odd-numbered exercises; descriptions of proof techniques are accessible and lively; students benefit from the historical discussions throughout the textbook; and an Instructorâ ™s Solutions Manual contains complete solutions to all exercises.

Book Information

File Size: 29088 KB

Print Length: 671 pages

Publisher: Waveland Press, Inc.; 1 edition (March 1, 2011)

Publication Date: November 26, 2013

Sold by:Â Digital Services LLC

Language: English

ASIN: B00GXHVBC0

Text-to-Speech: Not enabled

X-Ray for Textbooks: Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #215,033 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #13

inÂ Kindle Store > Kindle eBooks > Nonfiction > Science > Mathematics > Pure Mathematics >

Customer Reviews

I don't know why, but most text books on discrete math are pure garbage. This book seems very readable, I am using it to suppliment the text currently being used in our class. I feel a lot more confident now that I have some real words that describe the lesson we're working on. I have not fully picked over this book yet, so it may have some gotcha I have not seen yet, but so far I really am happy I picked this up. I spent most of the semester in a panic.The only thing that might approach a complaint, is that it is missing many of the algorithms we're covering in class. Not a huge deal, but maybe room for improvement?

In my former career as a Research Physicist, I was very comfortable with continuous mathematics i.e. real numbers, calculus, PDE etc. In my current career as a software engineer / computer scientist I wanted a deeper appreciation for the algorithms, I was developing and reading about, a better feel for the mathematics underlying computer science. After surveying a number of texts - I was extremely fortunate to have found Gary Chartrand's Discrete Mathematics. Over the course of 4 months I consistently (~750 pomodoros) worked through this book, making notes, doing exercises and applying the insights into my own work.The book itself is fun to read, Chartrand, has done an excellent job, in explaining sometimes complex concepts and making them accessible to the reader. The book is extremely well written - I found myself saying wow! a few times whilst reading the book. Most importantly the book has given me such a solid foundation in my career as a software engineer, helped me breeze through various Coursera courses, and increased my appreciation for such a beautiful subject.I'm a long time out of University, but learning is a life long endeavor - to all those students looking for a gateway to Discrete Mathematics - this book makes Discrete Mathematics come alive - I highly recommend this book by Gary Chartrand.

This book takes you from the ground up, starting with the basic composition of statements, and logic. It then moves into other topics such as sets, methods of proof, induction, relations and functions, graphs, trees, etc. I used this book as my first introduction to "discrete mathematics", having no background whatsoever of the topics covered. I found it to give very clear and lucid explanations and example problems that were easy to follow and geared towards a beginner of the subject matter covered. highly recommended as an introduction to the topics covered and as a self

study book.

Very satisfied with this book, I really recommend it.

A First Course in Discrete Mathematics (Springer Undergraduate Mathematics Series) Discrete Mathematics: Elementary and Beyond (Undergraduate Texts in Mathematics) Essentials Of Discrete Mathematics (Jones and Bartlett Publishers Series in Mathematics) Discrete Mathematics and Its Applications Seventh Edition Randomization Methods in Algorithm Design: Dimacs Workshop, December 12-14, 1997 (Dimacs Series in Discrete Mathematics and Theoretical Computer Science) 2000 Solved Problems in Discrete Mathematics Discrete Mathematics with Ducks Student Handbook for Discrete Mathematics with Ducks: SRRSLEH Discrete and Combinatorial Mathematics: An Applied Introduction Student's Solutions Guide to Accompany Discrete Mathematics and Its Applications, 7th Edition Mathematics: A Discrete Introduction Discrete Mathematics with Applications Discrete Mathematics: Introduction to Mathematical Reasoning Schaum's Outline of Discrete Mathematics, Revised Third Edition (Schaum's Outlines) Advanced Math: Precalculus with Discrete Mathematics and Data Analysis (Solution Key) Discrete Mathematics: Mathematical Reasoning and Proof with Puzzles, Patterns, and Games Discrete Mathematics DeMYSTiFied Discrete Mathematics Discrete Mathematics and Its Applications Discrete Mathematics, 7th Edition