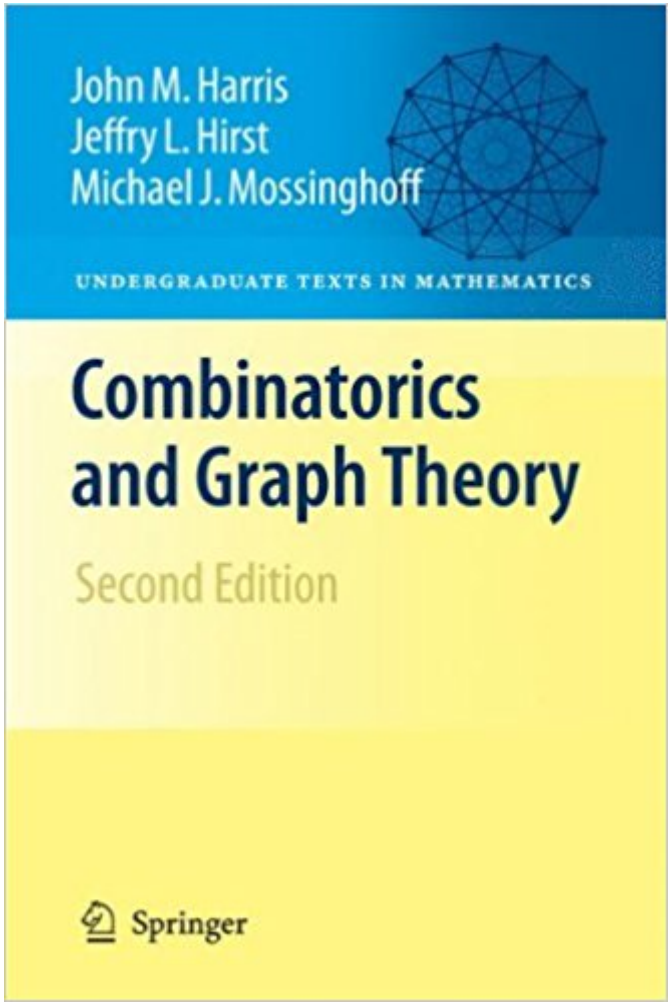
Combinatorics And Graph Theory (Undergraduate Texts In Mathematics)



Synopsis

These notes were first used in an introductory course team taught by the authors at Appalachian State University to advanced undergraduates and beginning graduates. The text was written with four pedagogical goals in mind: offer a variety of topics in one course, get to the main themes and tools as efficiently as possible, show the relationships between the different topics, and include recent results to convince students that mathematics is a living discipline.

Book Information

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Customer Reviews

From the reviews:SIAM REVIEW"The narrative and proofs are well written, and the authors are given to frequent uses of humor. Students should find this book as easy to read as any other good-quality text written with them in mind. Each of the three chapters concludes with several paragraphs describing an excellent selection of more advanced texts or papers to consider for further study"From the reviews of the second edition: Ã¢â ¬Å“Any undergraduate work in combinatorics or graph theory, whether a course or independent study, would likely be well served by this textbook Ã¢â ¬Â¦ . The authors offer a wide selection of topics, often in more depth than other undergraduate texts, in an engaging and clear style. Ã¢â ¬Â¦ Each chapter concludes with extensive notes on further reading.Ã¢â ¬Â• (Brian Hopkins, Mathematical Reviews, Issue 2010 b)Ã Â Ã¢â ¬Å“Combinatorics and Graph Theory is a popular pair of topics to choose for an undergraduate course. Ã¢â ¬Â¦ The book is written in a reader-friendly style and there are enough

exercises. Ã¢â ¬Â¦ It is certainly good that someone took the effort to write Ã¢â ¬Â¦ in a form that is appropriate for undergraduates. Ã¢â ¬Â¦ the book will most often be used for a reading class by a student who already has a background in combinatorics and who wants to learn about the set theoretical aspect of it.Ã¢â ¬Â• (MiklÃƒÂ s BÃƒÂ na, SIGACT News, Vol. 40 (3), 2009)Ã¢â ¬Å“This undergraduate textbook contains three chapters: Graph Theory, Combinatorics and Infinite Combinatorics and Graphs. Ã¢â ¬Â¦ There is a short section on References in each chapter introducing briefly other books dealing with the topics covered in the respective chapter. A full list of 293 references, about 550 exercises and an index with 13 pages are also provided.Ã¢â ¬Â• (Dalibor Froncek, Zentralblatt MATH, Vol. 1170, 2009)

This book covers a wide variety of topics in combinatorics and graph theory. It includes results and problems that cross subdisciplines, emphasizing relationships between different areas of mathematics. In addition, recent results appear in the text, illustrating the fact that mathematics is a living discipline. The second edition includes many new topics and features: Ã¢â ¬Â¢ New sections in graph theory on distance, Eulerian trails, and Hamiltonian paths. Ã¢â ¬Â¢ New material on partitions, multinomial coefficients, and the pigeonhole principle. Ã¢â ¬Â¢ Expanded coverage of PÃƒÂ lya Theory to include de BruijnÃ¢â ¬â„¢s method for counting arrangements when a second symmetry group acts on the set of allowed colors. Ã¢â ¬Â¢ Topics in combinatorial geometry, including Erdos and SzekeresÃ¢â ¬â„¢ development of Ramsey Theory in a problem about convex polygons determined by sets of points. Ã¢â ¬Â¢ Expanded coverage of stable marriage problems, and new sections on marriage problems for infinite sets, both countable and uncountable. Ã¢â ¬Â¢ Numerous new exercises throughout the book. About the First Edition: ". . . this is what a textbook should be! The book is comprehensive without being overwhelming, the proofs are elegant, clear and short, and the examples are well picked." Ã¢â ¬â ¢ Ioana Mihaila, MAA Reviews

My background: I am an MIS major that discovered too late that he had an intense love for the mathematics behind the magic of computer science. I had previously only taken business calc(!) and Discrete Math (for CS majors). The book assigned was Tucker’s book which does a great job on generating functions, but loses brevity completely when entering the field of recursive relations.This book’s explanations dealing with poker hands did what Tucker’s and Grimaldi’s books left me hanging on. Treatment on the binomial theorem and its related applications was also very thorough and at an acceptable level. The beauty of this book however is that the exercises rapidly

increase in punch, and I still return to it from time to time to tease out new relationships.It's introduction to graph theory is also very stellar... and it decides to introduce it before the combinatorial arguments, which if I'd had a little stronger comp sci background before taking the class, I would have found a much more gradual introduction to the general theories.I'm still raising in mathematical ability, and I plan on tackling this book when I've gotten a little more maturity under my belt.Excellent book. Hands down.

This was a required text for this course. There is probably a better graph theory text as this one could stand to go into more detail, but it's very concise and covers a lot. The seller was very honest and up front when not able to ship it immediately, but as my class was not using this text right away, that wasn't a problem. The seller provided great communication and was pleasant to do business with.

I'm a computer engineer and this textbook was part of a discrete mathematics course I took during undergrad. Firstly, I'll tell you that I love reading textbooks, but there are very few that are written and delivered in a manner that makes me actually want to read them through. This book is one of those few. I loved reading this book. The content is organized into nice, not-so-overwhelming chunks, which makes it an easy read for such technical content. The authors' styles and explanations are great. Some of the questions can be challenging (in a good way), but they are manageable and really solidify the material. I read the book from cover to cover and learned a ton. This was a few years ago and still I find myself recalling content from this book when I'm facing challenges that are remotely graph theory. I will even add that it's a great read for anyone in the software engineering field as it really hammers down on those essential graph theory concepts. One of the best textbooks I've ever read.

I would love it if there were answers to exercises. Maybe they exist in another document. If so I would buy it.

This book provides a good overview of basic graph theory and combinatorics. I have found it easy to read with good explanations and ample proof examples.

I find the book to explain exactly what it intends to, providing pertinent examples where useful. I wish there were more examples, actually, but there is something to be said for being concise. The

problems are well-organized and good problems. Also, it is a nice, sturdy hardcover version with non-glossy pages, which makes it easy to carry around without getting it beat up and easy on the eyes under fluorescent lights.

The shipping was quick, but the product was falling apart: binding split at the middle, pages falling out. Very disappointed with the product.

The book does an ok job of explaining things. However, there are very few examples.

Combinatorics and Graph Theory (Springer Undergraduate Texts in Mathematics and Technology) Combinatorics and Graph Theory (Undergraduate Texts in Mathematics) Graph Paper Notebook : Graph Paper Composition Book: 5mm Squares, A4 120 Pages, 8.5" x 11" Large Sketchbook Journal, For Mathematics, Sums, Formulas, Drawing etc (Graph Paper Notebooks) (Volume 2) Problems from the Discrete to the Continuous: Probability, Number Theory, Graph Theory, and Combinatorics (Universitext) A Walk through Combinatorics: An Introduction to Enumeration and Graph Theory (Third Edition) A Walk Through Combinatorics:An Introduction to Enumeration and Graph Theory Advanced Graph Theory and Combinatorics (Computer Engineering) Mathematics and Technology (Springer Undergraduate Texts in Mathematics and Technology) Discrete Mathematics: Elementary and Beyond (Undergraduate Texts in Mathematics) Proofs and Fundamentals: A First Course in Abstract Mathematics (Undergraduate Texts in Mathematics) Mathematics and Its History (Undergraduate Texts in Mathematics) Reading, Writing, and Proving: A Closer Look at Mathematics (Undergraduate Texts in Mathematics) The Mathematics of Medical Imaging: A BeginnerÃ¢â ¬â„¢s Guide (Springer Undergraduate Texts in Mathematics and Technology) The Mathematics of Nonlinear Programming (Undergraduate Texts in Mathematics) The Art of Proof: Basic Training for Deeper Mathematics (Undergraduate Texts in Mathematics) Linear Algebra: An Introduction to Abstract Mathematics (Undergraduate Texts in Mathematics) Graph Theory (Graduate Texts in Mathematics) Algebraic Graph Theory (Graduate Texts in Mathematics) Mathematical Introduction to Linear Programming and Game Theory (Undergraduate Texts in Mathematics) Elementary Number Theory: Primes, Congruences, and Secrets: A Computational Approach (Undergraduate Texts in Mathematics)

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