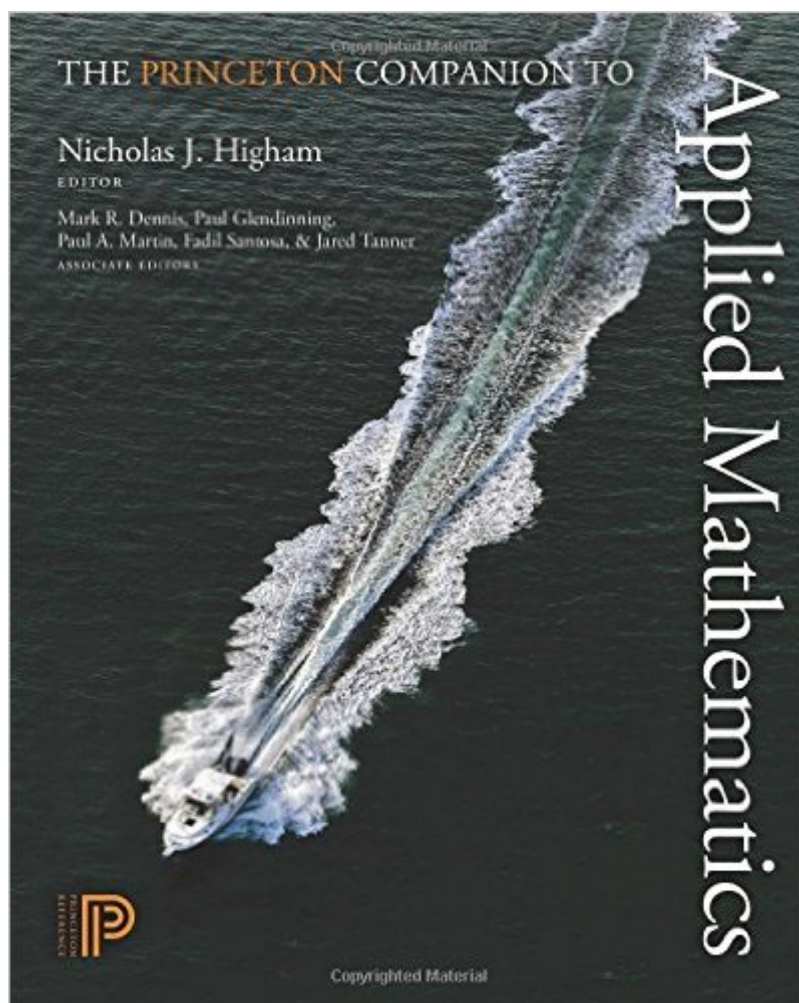


The book was found

The Princeton Companion To Applied Mathematics



Synopsis

This is the most authoritative and accessible single-volume reference book on applied mathematics. Featuring numerous entries by leading experts and organized thematically, it introduces readers to applied mathematics and its uses; explains key concepts; describes important equations, laws, and functions; looks at exciting areas of research; covers modeling and simulation; explores areas of application; and more. Modeled on the popular Princeton Companion to Mathematics, this volume is an indispensable resource for undergraduate and graduate students, researchers, and practitioners in other disciplines seeking a user-friendly reference book on applied mathematics. Features nearly 200 entries organized thematically and written by an international team of distinguished contributors. Presents the major ideas and branches of applied mathematics in a clear and accessible way. Explains important mathematical concepts, methods, equations, and applications. Introduces the language of applied mathematics and the goals of applied mathematical research. Gives a wide range of examples of mathematical modeling. Covers continuum mechanics, dynamical systems, numerical analysis, discrete and combinatorial mathematics, mathematical physics, and much more. Explores the connections between applied mathematics and other disciplines. Includes suggestions for further reading, cross-references, and a comprehensive index.

Book Information

Hardcover: 1016 pages

Publisher: Princeton University Press (September 15, 2015)

Language: English

ISBN-10: 0691150397

ISBN-13: 978-0691150390

Product Dimensions: 8.1 x 2.3 x 10.1 inches

Shipping Weight: 4.9 pounds (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 stars 15 customer reviews

Best Sellers Rank: #304,117 in Books (See Top 100 in Books) #75 in Books > Science & Math >

Mathematics > Reference #2690 in Books > Science & Math > Mathematics > Applied #3921

in Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

"The treasures [in the Princeton Companion to Applied Mathematics] go on and on."--Lloyd N.

Trefethen, SIAM Review "[An] impressive volume. . . . It has been a major project that eventually

resulted in this amazing product."--Adhemar Bultheel, European Mathematical Society "Safe to say

there is something for everyone in The Princeton Companion to Applied Mathematics."--Alan Stevens, *Mathematics Today*"[A] valuable addition to the mathematics library of any university or research institution."--*Library Journal*"Higham and his associate editors . . . have produced an admirably readable and informative volume, which anyone interested in applied mathematics would be well advised to consult or--better still--to own!"--James Case, *SIAM News*"A unique work full of beautiful and interesting mathematics. It is surely a valuable resource for exposing young mathematicians to possible areas of applied mathematics for research and further study. Without a doubt PCAM is an important contribution to the mathematical literature."--Jason M. Graham, *MathSciNet*"[A]n excellent reference that successfully compiles into a readable and engaging form the broad range of topics that an applied mathematician might encounter in their career. . . . As a reader, I find myself flipping through the pages and becoming engaged in new and interesting ideas from the world of applied math."--Joanna Bieri, *MAA Reviews*"A handy one-volume reference for applied mathematics that cuts across several disciplines within an academic framework."--Lesley S.J. Farmer, *Reference Reviews*"Astonishing. . . . As a reference, it is superb. . . . This book took years to produce, and that effort shows in the excellent final product."--Mark Hunacek, *Mathematical Gazette*

"Monumental and comprehensive, The Princeton Companion to Applied Mathematics does a breathtaking job of conveying the richness, depth, and vitality of today's applied mathematics. Better still, it does so in a remarkably clear and friendly voice. An instant classic."--Steven Strogatz, Cornell University and author of *The Joy of x*"The perfect companion to the earlier Companion. This book will be a landmark for decades ahead."--Nick Trefethen, University of Oxford"The Princeton Companion to Applied Mathematics is a tour de force, an incredible collection that should be on the shelf of every mathematician, of every scientist, and indeed of anyone fascinated with mathematics. It has something for everyone from beginner to advanced researcher, and is written in a style that will encourage reading outside one's area. It is comprehensive, authoritative, and beautifully written and organized, and I know of nothing comparable."--Simon A. Levin, Princeton University and editor of *The Princeton Guide to Ecology*"This remarkable volume takes on an impossible mission and completes it with style, precision, and scholarship. Collected here are definitive accounts of the major topics in modern applied mathematics by world leaders on the subject. The breadth of topics is enormous. Higham and his collaborators have compiled a special source that will be invaluable to researchers, students, and specialists alike."--J. Tinsley Oden, University of Texas at Austin"A lot of modern science is applied math. Thus, The Princeton Companion to Applied Mathematics is a

remarkable compendium of insight from across the sciences. Whether you want new insights into your own field or just want to learn something interesting about the world, this book is an ideal place to start."--John H. Miller, Carnegie Mellon University and the Santa Fe Institute"The editors are distinguished scientists and, perhaps of even more significance for a reference book like this, excellent expositors of mathematics across a range of levels."--Jan Hesthaven, Swiss Federal Institute of Technology in Lausanne"A welcome contribution to the field."--Andrea L. Bertozzi, University of California, Los Angeles"There is nothing like The Princeton Companion to Applied Mathematics, which will be extremely useful to both researchers and the mathematically inclined public. We have needed a book like this."--Steven Strogatz, author of *The Calculus of Friendship: What a Teacher and a Student Learned about Life while Corresponding about Math*

Excellent hefty reference book covers a broad spectrum of applied math topics in relatively short (several pages) and self-contained chapters. For the most part, you can dip into individual chapters as needed. The chapters are accessible for readers with a background at the lower division (sometimes upper division) undergraduate level but they have enough detail to provide a good start for more advanced practitioners. I would highly recommend this book.

Are you a mathematician? If you are, then this book is for you. Editors Mark R. Dennis, Paul Glendinning, Paul A. Martin, Fadil Santosa and Jared Tanner, have edited, managed and written an outstanding book, along with over 163 authors/contributors, that increasingly make use of algorithms and computation; as well as, a number of aspects that interface with computer science. The authors and editors begin by discussing what applied mathematics is and giving examples of the use of applied mathematics in every day life. Next, they focus on specific concepts that cut across different models and areas. Then, the authors and editors describe numerous examples with regards to equations, laws, and functions of applied mathematics. Also, they give an overview of applied mathematics areas and how they are organized and arranged by research area. Then, the authors and editors present a selection of mathematical models; and, explain how they are derived and solved. In addition, they cover a variety of interesting applied mathematics problems. Also, the authors and editors focus on connections between applied mathematics and other disciplines, including such diverse topics as integrated circuit (chip) design, medical imaging, and the screening of luggage in airports. Finally, they provide a summary of the book's approach on the broader aspects of reading, writing and typesetting mathematics; teaching applied mathematics; and, how to influence government as a mathematician. This excellent book is about

applied mathematics, why it is important, its connections to other disciplines, and some of the main areas of current research. This great book also explains what applied mathematicians do; which includes not only studying the subject itself, but also writing about mathematics, teaching it, and influencing policy makers.

Amazballz

Note that I want to comment on the Kindle format, not the content of this ebook. I own the paper and kindle versions of both Princeton Companions to Mathematics. The Princeton Companion to Applied Mathematics ebook implements the wrong headed concept of duplicating the page layout of the paper book and not just the contents of the book. Contrast this with the format of Princeton Companion to (pure) Mathematics which enables the choice of fonts designed for computer display, choice of one or two columns, number of words per line, font size and reflows the text instead of forcing the reader to constantly scroll the screen up and over to read the right column of every page. This completely removes eyestrain that is usually encountered when reading for long periods on your personal computer. Electronic books have their own advantages and should not be constricted by slavish duplication of paper books that make the reading experience greatly inferior to what it should be. The content is five star, very similar to The Princeton Companion to Mathematics.

This is a useful reference

If you like applied maths, don't hesitate to buy this book. I am a retired engineer in applied mathematics and I did see and follow the evolution of the field (introducing MATLAB in my company many years ago). Now I have more time to look at the so many diverse and interesting aspects of the field. I recommend this book and also the Princeton Companion to Mathematics, both are your time worth.

Excellent product, just what I needed for my crusty artisan breads. Best bread product I ever owned, hands down. And at such a reasonable price. low price and high quality. so fast, receive it next day . love it . a present ,

Excellent text

[Download to continue reading...](#)

The Princeton Companion to Applied Mathematics Differential Equations and Their Applications: An Introduction to Applied Mathematics (Texts in Applied Mathematics) (v. 11) Principles of Mathematical Analysis (International Series in Pure and Applied Mathematics) (International Series in Pure & Applied Mathematics) Introduction to the Foundations of Applied Mathematics (Texts in Applied Mathematics) Fractal Geometry and Dynamical Systems in Pure and Applied Mathematics I: Fractals in Pure Mathematics (Contemporary Mathematics) Entropy (Princeton Series in Applied Mathematics) The Princeton Companion to Mathematics Princeton Readings in Islamist Thought: Texts and Contexts from al-Banna to Bin Laden (Princeton Studies in Muslim Politics) The Princeton Field Guide to Prehistoric Mammals (Princeton Field Guides) The Princeton Field Guide to Dinosaurs: Second Edition (Princeton Field Guides) The Princeton Field Guide to Dinosaurs (Princeton Field Guides) Numerical Mathematics (Texts in Applied Mathematics) Companion Planting: Companion Gardening - A Practical Guide For Beginners To Learn Everything About Companion Planting (Organic Gardening, Container Gardening, Vegetable Gardening) The Common Core Mathematics Companion: The Standards Decoded, Grades 3-5: What They Say, What They Mean, How to Teach Them (Corwin Mathematics Series) Convex Analysis (Princeton Landmarks in Mathematics and Physics) The Classical Groups: Their Invariants and Representations (Princeton Landmarks in Mathematics and Physics) Applied Functional Analysis: Applications to Mathematical Physics (Applied Mathematical Sciences) (v. 108) Applied Functional Analysis: Main Principles and Their Applications (Applied Mathematical Sciences) 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 Biopharmaceutics & Pharmacokinetics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)