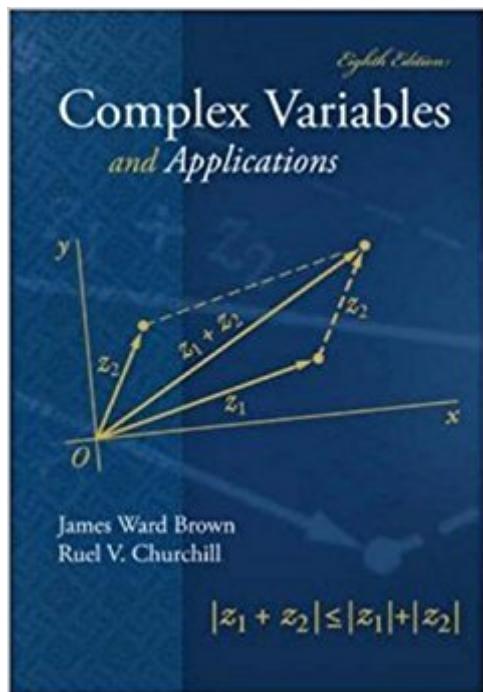


The book was found

# Complex Variables And Applications



## Synopsis

This text serves as an introductory course in the theory and application of functions of a complex variable. The text is designed to develop the theory that is prominent in applications of the subject. Readers will find a special emphasis given to the application of residues and conformal mappings.

## Book Information

Hardcover: 468 pages

Publisher: McGraw-Hill; 8 edition (January 10, 2008)

Language: English

ISBN-10: 0073051942

ISBN-13: 978-0073051949

Product Dimensions: 6.5 x 0.8 x 9.3 inches

Shipping Weight: 1.7 pounds

Average Customer Review: 3.8 out of 5 stars 50 customer reviews

Best Sellers Rank: #176,112 in Books (See Top 100 in Books) #19 in Books > Science & Math > Mathematics > Pure Mathematics > Functional Analysis #113 in Books > Science & Math > Mathematics > Mathematical Analysis #378 in Books > Textbooks > Science & Mathematics > Mathematics > Calculus

## Customer Reviews

Churchill, Professor Emeritus of Mathematics, University of Michigan.

So the book seems to be good for class material. It's very condensed though, each chapter is only about 1-2 pages. I'm sure at the level of mathematics that most people would be taking a class that would require this book it's to be expected. I'm only a math minor though so it was a bit of an adjustment for me. Not sure if anyone would be considering this for self study, but if you are I'd suggest an older version. It'd be much cheaper and comparing mine with a classmate who had a book 2 versions older there's not much difference, just the questions at the end of the chapters and maybe ordering of the chapters.

Comprehensive and easy to understand, this deceptively slim book will never be leaving my collection. From basic algebra to series and methods of integration and conformal mapping, this book covers it all and explains it in small little chunks so that you are never overwhelmed by new material. One new thing is taught, then some problems, then another thing, then some problems,

etc. You can advance through it fairly quickly depending on how many of the exercises you plan to do. The material in this book is necessary to really grasp complex analysis. It will not do to simply have a copy of Arfken or some other mathematical methods book that has a chapter or two on complex analysis. The book is very light on applications of complex analysis, but it's in-depth enough and without being overwhelming in its rigour or inscrutable notation that it's very useful for science and engineering majors to have.

book was in good condition. I have no complaints.

For me, this book serves as a firm grounding in the basics, before moving on to the doctoral prelim sequence in Complex Variables. It's also easy to see how it can support a self-contained course for those who will never need more than the fundamentals. And yes, as is so often said falsely of other books, this one is "ideal for self-study." Generally, the proofs flow easily: You can read them start to finish without all the inordinate cross-referencing of prior Lemmas, Corollaries, and Theorems that plagues lesser textbooks. Enough of that, and you might as well leave the proof in question for an exercise! I don't see much sacrificing of rigor, either; just a more conversational style with ordinary but precise language standing in for quantifiers and notation that require more mathematical maturity. A few seemingly minor but actually major points regarding style and presentation: The print is large enough to read without squinting to discern the difference between an  $i$  and a  $j$ , especially with double-indexing. Also, the text is not compacted onto the page; they leave space---and hence time---to digest a sentence before moving to the next. You never get the feeling that you're being inundated with more info than you could possibly absorb and retain. The illustrations are always drawn to an appropriate scale, and do indeed clarify rather than obfuscate. I think everyone knows, if only implicitly, what a difference these considerations make. All in all, we get just the right topics covered in just the right depth in a textbook of just the right size. A true modern classic!

I would recommend this book for anyone who needs to take a class like "Complex Variables" or is just fascinated with higher mathematics.

this is a decent intro to complex analysis. No substitute for a teacher but it has some good examples and explanations.

I purchased this book because the undergraduate course I took in complex analysis was taught by a

professor who preferred to use Schaum's Outlines: Complex Variables (With an Introduction to Conformal Mapping and Its Applications) accompanied by some fabulous lectures. I didn't save my lecture notes, though, and I wanted a more thorough refresher in the subject than Schaum's can give. So, my qualifications when turning to this text are the following: undergraduate degree in math, previous experience with complex analysis, more extensive experience with real analysis, very recent review of multivariable calculus (which I mention because of the numerous parallels between some of the line integral theorems and contour integrals in the complex plane). When I first picked up the book, it wasn't quite what I hoped for. Very short sections are divided into well-organized chapters. The sections themselves are hit-or-miss in terms of both depth and breadth of material. Some sections deal with a topic that seems meaty enough to warrant its own treatment (branch cuts and branch points) but without going into anything near the detail necessary to use the concept; others devote an entire section to a single theorem (Cauchy-Goursat) and another section to its proof; others combine several new ideas in one section devoted to treating a larger concept, the way most mathematics texts do. These sections are, unfortunately, few and far-between. In skimming superficially over an important topic or ponderously plodding through a single theorem without tying it to other material, the authors have created a book that feels disorganized and nebulous. For my purposes--review of a subject with which I am already passingly familiar--this text works fine. I can see connections before they're introduced because I already know where the theory is headed, and my previous experience with mathematics makes it easier to see how things fit into place in the larger framework of analysis. But I have to wonder how an undergraduate with no previous experience in complex analysis would fare using this text. Concepts are introduced before they're used, and some material that I thought was pretty complex (pardon the pun, har har) is glossed over as if it were completely obvious. The poor organization and layout contributes to the difficulty in comprehension. While the chapters are well-defined, and the sections are at least labeled by topic and numbered, I don't see how you could find your way through this text without copious highlighting. Theorems are offset with a nice bold "theorem/corollary/lemma" in front of them, but several are typeset to take up several lines so that, after the first paragraph break, it's easy to miss where the theorem ends and the discussion begins. The proofs are even worse. I never thought I'd yearn so desperately for three simple letters, but QEDs are completely missing from this text. Proofs go on for paragraphs, often interrupted by figures or even examples, without any sign from the layout that a conclusion has been reached or a new topic begun. Figures are often useful but poorly placed, so that the material referencing them is on a totally different portion of the page. Some theorems are stated more conversationally than elegantly, but at least that

means I get to practice rephrasing in my notes. The exercises in this text are very helpful. Examples are interspersed with the theory, often providing immediate applications and almost always assisting with the exercises at the end of the section. The exercises themselves are quite frequently guided with hints as to how to proceed (particularly with proofs) or accompanied by answers to enable work-checking. The progression of exercises is also very natural, working from simpler concepts to more advanced ones in a way that doesn't overwhelm the student. Generally, I would recommend this book to someone hoping to review a subject that they already have some understanding of. Enough of the theory is obtuse enough that I wouldn't recommend it to someone who was looking for something to help them better understand the subject, but, unfortunately, I also can't think of a BETTER text. Overall, this book has no killing flaws. It does what it sets out to do. I just can't imagine how the eighth edition manages to have organizational flaws and skimpy detail after seven previous editions for students to complain about.

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

Complex Variables and Applications (Brown and Churchill) Complex Variables and Applications Complex Variables: Second Edition (Dover Books on Mathematics) The Passive Voice and Reported Speech: Your grammar torch to shed light on passive voice, reported speech, complex subject, complex object and cleft (Brookgarbolt's treasure Book 2) How Goats Can Fight Poverty: Complex problems do not always need complex solutions Making Things Work: Solving Complex Problems in a Complex World Transgender Lives: Complex Stories, Complex Voices Schaum's Outline of Probability, Random Variables, and Random Processes, Second Edition (Schaum's Outline Series) Schaum's Outline of Probability, Random Variables, and Random Processes, 3rd Edition (Schaum's Outlines) Statistics Laminate Reference Chart: Parameters, Variables, Intervals, Proportions (Quickstudy: Academic ) Mathematical Analysis: An Introduction to Functions of Several Variables Real Variables with Basic Metric Space Topology (Dover Books on Mathematics) Functions of Several Real Variables Linear and Complex Analysis for Applications (Advances in Applied Mathematics) Nutritional Foundations and Clinical Applications: A Nursing Approach, 5e (Foundations and Clinical Applications of Nutrition) Transportation Systems Analysis: Models and Applications (Springer Optimization and Its Applications) 3D Reconstruction: Methods, Applications and Challenges (Computer Science, Technology and Applications) Structural Analysis: With Applications to Aerospace Structures (Solid Mechanics and Its Applications) Encapsulation Technologies for Electronic Applications (Materials and Processes for Electronic Applications) Price Theory and Applications (with Economic Applications, InfoTrac 2-Semester Printed Access Card)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)