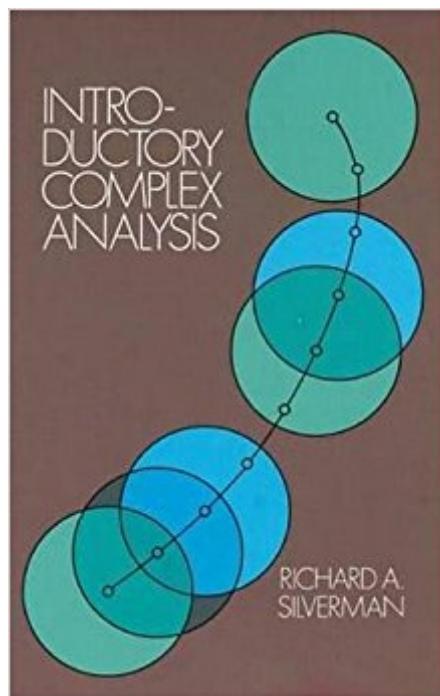The book was found

Introductory Complex Analysis (Dover Books On Mathematics)

Synopsis

Introductory Complex Analysis is a scaled-down version of A. I. Markushevich's masterly three-volume "Theory of Functions of a Complex Variable." Dr. Richard Silverman, the editor and translator of the original, has prepared this shorter version expressly to meet the needs of a one-year graduate or undergraduate course in complex analysis. In his selection and adaptation of the more elementary topics from the original larger work, he was guided by a brief course prepared by Markushevich himself.The book begins with fundamentals, with a definition of complex numbers, their geometric representation, their algebra, powers and roots of complex numbers, set theory as applied to complex analysis, and complex functions and sequences. The notions of proper and improper complex numbers and of infinity are fully and clearly explained, as is stereographic projection. Individual chapters then cover limits and continuity, differentiation of analytic functions, polynomials and rational functions, Mobius transformations with their circle-preserving property, exponentials and logarithms, complex integrals and the Cauchy theorem , complex series and uniform convergence, power series, Laurent series and singular points, the residue theorem and its implications, harmonic functions (a subject too often slighted in first courses in complex analysis), partial fraction expansions, conformal mapping, and analytic continuation.Elementary functions are given a more detailed treatment than is usual for a book at this level. Also, there is an extended discussion of the Schwarz-Christolfel transformation, which is particularly important for applications.There is a great abundance of worked-out examples, and over three hundred problems (some with hints and answers), making this an excellent textbook for classroom use as well as for independent study. A noteworthy feature is the fact that the parentage of this volume makes it possible for the student to pursue various advanced topics in more detail in the three-volume original, without the problem of having to adjust to a new terminology and notation .In this way, IntroductoryComplex Analysis serves as an introduction not only to the whole field of complex analysis, but also to the magnum opus of an important contemporary Russian mathematician.

Book Information

Product Dimensions: 5.4 x 0.8 x 8.4 inches

Shipping Weight: 6.4 ounces (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars   15 customer reviews

Best Sellers Rank: #422,321 in Books (See Top 100 in Books)   #121 inÃ Â Books > Science & Math > Mathematics > Pure Mathematics > Number Theory   #3525 inÃ Â Books > Science & Math > Mathematics > Applied   #5125 inÃ Â Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

Richard A. Silverman: Dover's Trusted AdvisorRichard Silverman was the primary reviewer of our mathematics books for well over 25 years starting in the 1970s. And, as one of the preeminent translators of scientific Russian, his work also appears in our catalog in the form of his translations of essential works by many of the greatest names in Russian mathematics and physics of the twentieth century. These titles include (but are by no means limited to): Special Functions and Their Applications (Lebedev); Methods of Quantum Field Theory in Statistical Physics (Abrikosov, et al); An Introduction to the Theory of Linear Spaces, Linear Algebra, and Elementary Real and Complex Analysis (all three by Shilov); and many more. During the Silverman years, the Dover math program attained and deepened its reach and depth to a level that would not have been possible without his valuable contributions.

Comprehensive.

I originally bought this text because of the low price - $10 or so for a book on Complex Analysis is a steal, given what many textbooks are, new or used. Also, the book had positive to excellent reviews on this site, so I figured that I had little to lose.As it turns out, the book was a big disappointment for me. Essentially, it is an abridged edition of a much larger work written by a prominent Russian mathematician. Hence, the organization is clear and logical, and for those who have already taken a class and are reasonably considered experts, there are many clear and fascinating interconnections. There is nothing really wrong with the development of the book, and Dr. Silverman understands the topic well.Yet, what I was looking for was something to help me to understand the class and subject, and this was where the book proved unhelpful. It is too short for the average reader to be able to appreciate the subtleties of thought and organization of a master mathematician, and contains too few examples to help a student. The examples are basic and

perfunctory and do not deepen understanding and are a kind of non-essential blip in the logical development. It would have been better to have no examples and to have a very technical monograph on part of the topic than to pretend to thoroughness re: complex analysis in its entirety.So, for a student it is not helpful, and specialists can do much better. On the other hand, the development is clear and insightful, and $10 is pretty cheap for a book of reasonable quality.

Excellent value. Book is slightly worn, but since I am buying the contents, the superficial blemishes hardly matter.

everything excellent

My aim is not to comment on the book.I just want to pay a salute to Dr. Silverman who have spenthis time in translating mnay of the books written not on English.Most of the books are of high quality.Without him, we have no chance in reading these books.Thnaks a lot to Dr. Sliverman again!!One pity is that in the translating books,no mention of Dr. Silverman's life.For example, which university he is teaching?

It's O.K. in the first part (first six chapters). It has few problems and most of them are demonstrations after chapter six. I think it is pretty theoretical for engineering. It's O.K. as a support book.

Equations and mathematical symbols are impossible to read. Do not purchase technical books until kindle readers support them.

OK. Kelly needs it , delivery on time receive it next day . EVERYTHING IS GREAT. Beyond what I expected! The price made it that much better... The seller was great he reached out to me asking how I liked the item and I felt he was genuinely caring what my opinion . Great product

Download to continue reading...

Introductory Complex Analysis (Dover Books on Mathematics) Mathematics for Quantum Mechanics: An Introductory Survey of Operators, Eigenvalues, and Linear Vector Spaces (Dover Books on Mathematics) Introductory Real Analysis (Dover Books on Mathematics) Complex Analysis For Mathematics And Engineering (International Series in Mathematics) Complex Variables: Second Edition (Dover Books on Mathematics) Introductory Graph Theory (Dover Books

on Mathematics) Introductory Discrete Mathematics (Dover Books on Computer Science) Complex Analysis (Undergraduate Texts in Mathematics) Linear and Complex Analysis for Applications (Advances in Applied Mathematics) Complex Analysis (Princeton Lectures in Analysis, No. 2) 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 READING ORDER: TAMI HOAG: BOOKS LIST OF THE BITTER SEASON, KOVAC/LISKA BOOKS, HENNESSY BOOKS, QUAID HORSES, DOUCET BOOKS, DEER LAKE BOOKS, ELENA ESTES BOOKS, OAK KNOLL BOOKS BY TAMI HOAG Mathematics and the Imagination (Dover Books on Mathematics) One Hundred Problems in Elementary Mathematics (Dover Books on Mathematics) The Nature and Power of Mathematics (Dover Books on Mathematics) Mathematics for the Nonmathematician (Dover Books on Mathematics) Understanding Infinity: The Mathematics of Infinite Processes (Dover Books on Mathematics)