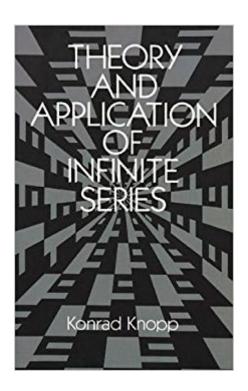The book was found

Theory And Application Of Infinite Series (Dover Books On Mathematics)

Synopsis

This classic work, written in a clear and interesting style, with many exercises, offers a thorough and reliable treatment of an important branch of higher analysis. It lends itself well to use in course work; however, because of its consistent clear illustrations of theoretical difficulties, the book is also ideal for self-study.Since all higher analysis depends on the theory of numbers, Professor Knopp (formerly Professor of Mathematics, University of TÃƒÂ bingen) begins with an introduction to the theory of real numbers, an indispensable foundation for what is to come. This introduction is followed by an extensive account of the theory of sequences and the actual theory of infinite series. The latter is covered in two stages: (1) the classical theory (2) later developments of the 19th century.Carefully selected exercises have been included throughout, emphasizing applications of the theory, rather than purely theoretical considerations.Aimed at students already acquainted with the elements of differential and integral calculus, this work grew out of the author's lectures and course work at the universities of Berlin and KÃƒÂ¶nigsberg. This pedagogical background helped him achieve a work of utmost clarity and precision Ã¢â ¬â • one that belongs in the library of every serious mathematician or student of higher analysis.

Book Information

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Customer Reviews

Text: English Original Language: German

May not be the most modern text on the subject, but it is written clearly and carefully explains the

subject. The introduction chapter is a very useful refresher for non- mathematicians. Overall it provides a good treatment of subject, recommended for self study provided you have a reasonable knowledge of calculus and complex numbers (for the later chapters.

This is a very fantastic book on infinite series. The coverage of subjects in the book is very comprehensive and goes way beyond a simple introduction to infinite series. Reading this book though, I would recommend teaching yourself Real/Complex Analysis along with this as it will give you greater insights. Overall though I am pleased with this book, and the price cannot be beat.

First published in 1921, still one of the best books dealing with series

Excellent

Dr. Knopp was a serious mathematician.The book becomes harder to study when you face with older notations.I wish the translator could change them to modern way.

I read this book in graduate school, though it was not required or assigned, I heard about it and read it carefully cover-to-cover. Twenty years later I am now in the process of reading it again, carefully, cover-to-cover. I found this book to be indispensable reading for studying higher level math. It's really a beautiful book and a classic. But I don't think it would be good to read as a first introduction to the subject.The real problem with this book is its 1920's style. It desperately needs to be updated to modern exposition. There is WAY too much flowery exposition in his construction of the real numbers. I think it could be cut down by 2/3 without losing any content and be far more readable by a modern student. Maybe I'll do that if I get a chance, since I doubt there are still copyrights on a book this old.There are several ways to construct the real numbers. Knopp chose to use "nets". He also discusses Dedekind cuts and the approach of using Cauchy sequences. If I were to update this book I would still use nets, because it would be too big of a modification. But if I were writing the subject from scratch I would use Cauchy sequences because that is the method that generalizes best to arbitrary metric spaces.But once you get past these painful introductions, and get used to his style, the rest of the book is really very pleasant to read. If you take the time to study this well, you will be a better mathematician all around.

The Kindle edition is a flawed copy of the paper edition. I only have two examples, but being a math

text where every symbol counts, that's enough for me to abandon the electronic version in favor of the paper version.Example 1: Page 6 in the print book compares sets named M and N, but on the Kindle these are both referred to as M.Example 2: Reference numbers set aside in the margin of the paper edition get interspersed throughout the Kindle edition. This is confusing as they sometimes come in the middle of an ordered list.I encountered both problems very early, so there may be many more problems. The text is already a challenge for me, so I don't need additional, unnecessary problems to sort out. I do not recommend the Kindle version.

This is a classic book written by Knopp who shows a complete mastery of the subject. The construction of real numbers is unique and he uses nests to define them. If ever you wanted information on series then this book is a bible on that topic. Any student of mathematics must have this in his collection. The translator has done an excellent job.Dr. Knopp also has a series of books on the theory of complex functions and are highly recommended.

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