

<<分析入门>>

图书基本信息

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作者：雅培

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内容概要

My primary goal in writing *Understanding Analysis* was to create an elementary one-semester book that exposes students to the rich rewards inherent in taking a mathematically rigorous approach to the study of functions of a real variable. The aim of a course in real analysis should be to challenge and improve mathematical intuition rather than to verify it. There is a tendency, however, to center an introductory course too closely around the familiar theorems of the standard calculus sequence. Producing a rigorous argument that polynomials are continuous is good evidence for a well-chosen definition of continuity, but it is not the reason the subject was created and certainly not the reason it should be required study. By shifting the focus to topics where an untrained intuition is severely disadvantaged (e.g., rearrangements of infinite series, nowhere-differentiable continuous functions, Fourier series) , my intent is to restore an intellectual liveliness to this course by offering the beginning student access to some truly significant achievements of the subject.

<<分析入门>>

书籍目录

Preface
 1 The Real Numbers
 1.1 Discussion : The Irrationality of $\sqrt{2}$
 1.2 Some Preliminaries
 1.3 The Axiom of Completeness
 1.4 Consequences of Completeness
 1.5 Cantor's Theorem
 1.6 Epilogue
 2 Sequences and Series
 2.1 Discussion : Rearrangements of Infinite Series
 2.2 The Limit of a Sequence
 2.3 The Algebraic and Order Limit Theorems
 2.4 The Monotone Convergence Theorem and a First Look at Infinite Series
 2.5 Subsequences and the Bolzano-Weierstrass Theorem
 2.6 The Cauchy Criterion
 2.7 Properties of Infinite Series
 2.8 Double Summations and Products of Infinite Series
 2.9 Epilogue
 3 Basic Topology of \mathbb{R}
 3.1 Discussion : The Cantor Set
 3.2 Open and Closed Sets
 3.3 Compact Sets
 3.4 Perfect Sets and Connected Sets
 3.5 Baire's Theorem
 3.6 Epilogue
 4 Functional Limits and Continuity
 4.1 Discussion : Examples of Dirichlet and Thomae
 4.2 Functional Limits
 4.3 Combinations of Continuous Functions
 4.4 Continuous Functions on Compact Sets
 4.5 The Intermediate Value Theorem
 4.6 Sets of Discontinuity
 4.7 Epilogue
 5 The Derivative
 5.1 Discussion : Are Derivatives Continuous?
 5.2 Derivatives and the Intermediate Value Property
 5.3 The Mean Value Theorem
 5.4 A Continuous Nowhere-Differentiable Function
 5.5 Epilogue
 6 Sequences and Series of Functions
 6.1 Discussion : Branching Processes
 6.2 Uniform Convergence of a Sequence of Functions
 6.3 Uniform Convergence and Differentiation
 6.4 Series of Functions
 6.5 Power Series
 6.6 Taylor Series
 6.7 Epilogue
 7 The Riemann Integral
 7.1 Discussion : How Should Integration be Defined?
 7.2 The Definition of the Riemann Integral
 7.3 Integrating Functions with Discontinuities
 7.4 Properties of the Integral
 7.5 The Fundamental Theorem of Calculus
 7.6 Lebesgue's Criterion for Riemann Integrability
 7.7 Epilogue
 8 Additional Topics
 8.1 The Generalized Riemann Integral
 8.2 Metric Spaces and the Baire Category Theorem
 8.3 Fourier Series
 8.4 A Construction of \mathbb{R} From \mathbb{Q}
 Bibliography
 Index

<<分析入门>>

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