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<<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.

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