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Nota di contenuto	<ul> <li>Front Cover; An Introduction to Real Analysis; Copyright Page; Table of Contents; PREFACE; INTRODUCTION. THE PURPOSE OF REAL ANALYSIS; CHAPTER 1. SETS, RELATIONS, AND FUNCTIONS; 1.1. Sets; 1.2. Relations and Functions; CHAPTER 2. NUMBERS; 2.1. Natural numbers;</li> <li>2.2. Integers; 2.3. Rationals; 2.4. Real Numbers; 2.5. Irrationals; 2.6. Appendix; CHAPTER 3. SEQUENCES; 3.1. Introduction; 3.2. Limits of sequences; 3.3. Elementary theorems about sequences; 3.4. Behaviour of monotonie sequences; 3.5. Sequences defined by recurrence relations; 3.6. More sequences and their limits</li> <li>3.7. Upper and lower limitsCHAPTER 4. SERIES; 4.1. Introduction; 4.2. Convergence of a series; 4.3. More series, convergent and divergent; 4.4 The comparison test; 4.5. Decimal representation; 4.6. Absolute convergence; 4.7. Conditional convergence; 4.8. Rearrangement of series; 4.9. Multiplication of series; CHAPTER 5. FUNCTIONS OF A REAL VARIABLE; 5.1. Introduction; 5.2. Limits; 5.3. Properties of limits; 5.4. Continuity; 5.5. The place of pathological functions in real analysis; 5.6. The nature of discontinuities; 5.7. Properties of continuous functions; CHAPTER 6. THE DERIVATIVE</li> <li>6.1. Derivatives and their evaluation6.2. Rolle's theorem and the nature of the derivative; 6.3. Mean value theorems; 6.4. Applications of derivatives; 6.5. Taylor series; CHAPTER 7. SOME IMPORTANT FUNCTIONS AND EXPANSIONS; 7.1. Power series; 7.2. The exponential function; 7.3. Trigonometric functions; 7.4. Logarithmic functions; 7.5.</li> </ul>

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	Infinite products; 7.6. The binomial theorem; CHAPTER 8. THE RIEMANN INTEGRAL; 8.1. Introduction; 8.2. The Riemann integral; 8.3. Integrability of monotonic functions; 8.4. Continuous functions and the Riemann integral 8.5. Further applications of the fundamental theorem8.6. Alternative approach to the logarithmic function; 8.7. Infinite and improper integrals; 8.8 Volumes of revolution; ANSWERS AND HINTS; INDEX
Sommario/riassunto	An Introduction to Real Analysis presents the concepts of real analysis and highlights the problems which necessitate the introduction of these concepts. Topics range from sets, relations, and functions to numbers, sequences, series, derivatives, and the Riemann integral. This volume begins with an introduction to some of the problems which are met in the use of numbers for measuring, and which provide motivation for the creation of real analysis. Attention then turns to real numbers that are built up from natural numbers, with emphasis on integers, rationals, and irrationals. The chapters tha