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Nota di contenuto	Front Cover; Contents; Preface; Preface for Students; Acknowledgments; Authors; Part I: Elementary Analysis; Chapter 1: Basic Concepts; Chapter 2: Continuity and Limits; Chapter 3: Differentiability; Chapter 4: Integration of Continuous Functions; Part II: Higher Analysis; Chapter 5: Basic Concepts Revisited; Chapter 6: L'Hopital's Rule and Higher Order Derivatives; Chapter 7: Sequences and Series; Chapter 8: First Order Differential Equations; Chapter 9: Integration; Chapter 10: Topology of Real Numbers; Answers to Exercises; Appendix: Foundations and Relative Set Theory; Bibliography Back Cover
Sommario/riassunto	Analysis with Ultrasmall Numbers presents an intuitive treatment of mathematics using ultrasmall numbers. With this modern approach to infinitesimals, proofs become simpler and more focused on the combinatorial heart of arguments, unlike traditional treatments that use epsilon-delta methods. Students can fully prove fundamental results, such as the Extreme Value Theorem, from the axioms

immediately, without needing to master notions of supremum or compactness. The book is suitable for a calculus course at the undergraduate or high school level or for self-study with an emphasis on nonstandard