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Soggetti	Mathematical analysis Analysis (Mathematics) Analysis
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Functions of Several Variables -- 1. $\mathbb{R}^p \rightarrow \mathbb{R}$ functions -- 2. $\mathbb{R}^p \rightarrow \mathbb{R}^q$ functions -- 3. The Jordan Measure -- 4. The Integral of Multivariable Functions I -- 5. The Integral of Multivariable Functions II -- 6. Infinite Series -- 7. Sequences and Series of Functions -- 8. Miscellaneous Topics -- 9. Hint, Solutions -- References -- Index -- Notation.
Sommario/riassunto	This book develops the theory of multivariable analysis, building on the single variable foundations established in the companion volume, Real Analysis: Foundations and Functions of One Variable. Together, these volumes form the first English edition of the popular Hungarian original, Valós Analízis I & II, based on courses taught by the authors at Eötvös Loránd University, Hungary, for more than 30 years. Numerous exercises are included throughout, offering ample opportunities to master topics by progressing from routine to difficult problems. Hints or solutions to many of the more challenging exercises make this book ideal for independent study, or further reading. Intended as a sequel to a course in single variable analysis, this book builds upon and expands these ideas into higher dimensions. The modular organization makes this text adaptable for either a semester or year-long introductory course. Topics include: differentiation and integration of functions of several variables; infinite numerical series; sequences and series of functions; and applications to other areas of mathematics. Many historical notes are given and there is an emphasis on conceptual

understanding and context, be it within mathematics itself or more broadly in applications, such as physics. By developing the student's intuition throughout, many definitions and results become motivated by insights from their context.
