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Nota di contenuto	Preface -- 1. Preliminaries -- 2. Metric Spaces -- 3. Special Spaces -- 4. Normed Spaces -- 5. Linear Functionals -- 6. Fundamental Theorems -- 7. Hilbert Spaces -- A. Hilbert Spaces $L_2(J)$ -- References -- Index.
Sommario/riassunto	This concise text provides a gentle introduction to functional analysis. Chapters cover essential topics such as special spaces, normed spaces, linear functionals, and Hilbert spaces. Numerous examples and counterexamples aid in the understanding of key concepts, while exercises at the end of each chapter provide ample opportunities for practice with the material. Proofs of theorems such as the Uniform Boundedness Theorem, the Open Mapping Theorem, and the Closed Graph Theorem are worked through step-by-step, providing an accessible avenue to understanding these important results. The prerequisites for this book are linear algebra and elementary real analysis, with two introductory chapters providing an overview of material necessary for the subsequent text. Functional Analysis offers an elementary approach ideal for the upper-undergraduate or beginning graduate student. Primarily intended for a one-semester introductory course, this text is also a perfect resource for independent study or as the basis for a reading course. .