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Sommario/riassunto	This textbook provides a comprehensive exploration of special functions and fractional calculus, offering a structured approach through solved and proposed exercises. Covering key mathematical concepts such as Mittag-Leffler functions, Kilbas-Saigo functions, and the Erdélyi-Kober fractional integral, it balances theoretical insights with practical applications. Appendices introduce Barnes G-functions and demonstrate the use of Mathematica for fractional calculus, expanding the book's accessibility. With an updated index and extensive references, this edition serves as a valuable resource for researchers, graduate students, and professionals in applied mathematics and related fields.