Record Nr. UNINA9910763595703321 Autore Rahmani-Andebili Mehdi **Titolo** Calculus I [[electronic resource]]: Practice Problems, Methods, and Solutions / / by Mehdi Rahmani-Andebili Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 **ISBN** 3-031-45028-0 Edizione [2nd ed. 2023.] Descrizione fisica 1 online resource (228 pages) 620.00151 Disciplina **Engineering mathematics** Soggetti Mathematical analysis Differential equations Mathematics **Engineering Mathematics** Integral Transforms and Operational Calculus **Differential Equations** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Problems: Functions and Inverse Functions -- Solutions of Problems: Nota di contenuto Functions and Inverse Functions -- Trigonometric Equations and Identities -- Solutions of Problems: Trigonometric Equations and Identities -- Problems: Limit and Continuity -- Solutions to Problems: Limit and Continuity -- Problems: Derivatives and Their Applications --Solutions of Problems: Derivatives and Applications of Derivatives --Problems: Definite and Indefinite Integrals -- Solutions to Problems: Definite and Indefinite Integrals. This study guide is designed for students taking a Calculus I course. Sommario/riassunto This new edition includes expanded examples, questions, and practice problems that will help students to review and sharpen their knowledge of the subject and enhance their performance in the classroom. New material covered in the second edition includes types of functions. inverse functions, combinations of functions, domain and range of

functions, axis of symmetry of functions, trigonometric equations and identities, limits and continuity, derivatives and their applications, and

definite and indefinite integrals. Offering detailed solutions, multiple methods for solving problems, and clear explanations of concepts, this hands-on guide will improve students' problem-solving skills and foster a solid understanding of calculus, which will benefit them in all of their calculus-based courses. Exercises cover a wide selection of basic and advanced questions and problems; Arranges problems by difficulty level, catering to both well-prepared and less-experienced students; Provides detailed and instructor-recommended solutions and methods, along with clear explanations.