Record Nr. UNINA9910962859003321 Autore Courant Richard <1888-1972.> Titolo Introduction to Calculus and Analysis I / / by Richard Courant, Fritz John Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 1999 **ISBN** 3-642-58604-X Edizione [1st ed. 1999.] Descrizione fisica 1 online resource (XXIII, 661 p. 184 illus.) Collana Classics in Mathematics, , 2512-5257 Altri autori (Persone) JohnFritz <1910-1994.> CourantRichard <1888-1972.> Disciplina 515 Soggetti Functions of real variables Functions, Special **Real Functions** Special Functions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Based on the first author's Vorlesungen uber Differential- und Integralrechnung. Reprint. Originally published: New York: Interscience Publishers, 1965. 1 Introduction -- 2 The Fundamental Ideas of the Integral and Nota di contenuto Differential Calculus -- 3 The Techniques of Calculus -- 4 Applications in Physics and Geometry -- 5 Taylor's Expansion -- 6 Numerical Methods -- 7 Infinite Sums and Products -- 8 Trigonometric Series --9 Differential Equations for the Simplest Types of Vibration -- List of Biographical Dates. Sommario/riassunto From the reviews: "Volume 1 covers a basic course in real analysis of one variable and Fourier series. It is well-illustrated, well-motivated and very well-provided with a multitude of unusually useful and accessible exercises. (...) There are three aspects of Courant and John in which it outshines (some) contemporaries: (i) the extensive historical references, (ii) the chapter on numerical methods, and (iii) the two chapters on physics and geometry. The exercises in Courant and John are put together purposefully, and either look numerically interesting. or are intuitively significant, or lead to applications. It is the best text known to the reviewer for anyone trying to make an analysis course

less abstract. (...)" The Mathematical Gazette (75.1991.471).