

1. Record Nr.	UNISA996495170503316
Autore	Torchinsky Alberto
Titolo	A modern view of the Riemann integral // Alberto Torchinsky
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	9783031117992 9783031117985
Descrizione fisica	1 online resource (182 pages)
Collana	Lecture Notes in Mathematics ; ; v.2309
Disciplina	618
Soggetti	Riemann integral Integral de Riemann Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Contents -- 1 Introduction -- 2 The -Riemann Integral -- 2.1 The Volume of a Lake -- 2.2 Rate of Approximation -- 2.3 Quadrature Rules -- 2.4 Roots of Nonlinear Equations -- Monotonicity of Riemann Sums -- 3 A Convergence Theorem -- 3.1 The Riemann-Lebesgue Lemma -- 3.2 The Weierstrass Approximation Theorems -- 4 The Modified -Riemann Sums -- 4.1 Uniformly Distributed Sequences -- 5 The Pattern and Uniform Integrals -- 6 The Improper and Dominated Integrals -- 6.1 Improper Integrals of the First Type -- 6.2 The Dominated Integral -- 6.3 Improper Integrals of the Second Type -- 7 Coda -- Appendix I -- Appendix I -- Change of Variable Formulas for Riemann Integrals -- The Substitution Formula -- The Substitution Formula -- Change of Variable Formula, Riemann Integral -- Substitution Formula, Riemann-Stieltjes Integral -- Change of Variable Formula, Riemann-Stieltjes Integral -- Caveat -- Appendix II -- Appendix II -- Cauchy Integrability Implies Riemann Integrability -- References -- Index.