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Note generali	Co-published with Cognella Academic Publishing. Includes index.
Nota di contenuto	1. Approximation of arbitrary functions using Taylor polynomials -- Taylor polynomials based at 0 -- Taylor polynomials based at an arbitrary point -- 2. Error in approximation using Taylor polynomials -- The error in the approximation by a Taylor polynomial -- The limit as the order of Taylor polynomial increases -- 3. Introduction to the infinite series -- 4. Tests for absolute convergence -- The monotone convergence principle and absolute -- Convergence -- The ratio test -- The root test -- The proofs of the ratio test and the root test -- 5. An introduction to power series -- The definitions -- Convergence properties of a power series -- Differentiation of functions defined by power series -- 6. Using termwise integration, multiplication and division to determine Taylor series -- Termwise integration of power series -- Arithmetic operations on Taylor series -- The binomial series -- 7. Testing for absolute convergence with the integral and comparison tests -- The integral test -- Error estimates related to the integral test -- Comparison tests -- 8. Using conditional convergence to determine alternating series -- Alternating series --

9. An introduction to the Fourier series -- Fourier series of 2π -periodic functions -- Fourier series when the period is different from 2π -- Index.
