Record Nr. UNINA9910462571703321 Autore Gillies Donald <1944-, > Frege, Dedekind and Peano on the foundations of arithmetic // D.A. Titolo Gillies Abingdon, Oxon;; New York:,: Routledge,, 2011 Pubbl/distr/stampa **ISBN** 1-283-96574-7 0-203-81628-5 1-136-72108-8 Descrizione fisica 1 online resource (114 p.) Collana Routledge revivals Disciplina 513 Arithmetic - Foundations Soggetti Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "First published in 1982 by Van Gorcum"--T.p. verso. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover: Frege, Dedekind and Peano on the Foundations of Arithmetic: Title Page; Copyright Page; Preface; Table of Contents; Introduction; 1. Kant's Theory of Mathematics; 2. Frege's Criticisms of Kant; 3. Mill's Theory of Mathematics; 4. Frege's Criticisms of Mill; 5. The content of a statement of number is an assertion about a concept; 6. Frege's Platonism; 7. Frege's Logicism; 8. Dedekind and Set Theory; 9. Dedekind's Development of Arithmetic; 10. Peano's Axioms. General Comparison of Frege, Dedekind, and Peano; 11. Frege's Begriffsschrift; 12. Frege's Grundgesetze, and Russell's paradox Appendix I. On NotationAppendix II. On the Principle of Mathematical, or Complete, Induction; References; Index Sommario/riassunto First published in 1982, this reissue contains a critical exposition of the views of Frege, Dedekind and Peano on the foundations of arithmetic. The last guarter of the 19th century witnessed a remarkable growth of interest in the foundations of arithmetic. This work analyses both the reasons for this growth of interest within both mathematics and philosophy and the ways in which this study of the foundations of arithmetic led to new insights in philosophy and striking advances in logic. This historical-critical study provides an excellent introduction to the problems of the philosop