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Titolo	Selected Exercises in Algebra [[electronic resource]] : Volume 1 // by Rocco Chirivì, Ilaria Del Corso, Roberto Dvornicich
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Descrizione fisica	1 online resource (XVI, 240 p. 27 illus.)
Collana	La Matematica per il 3+2, , 2038-5722 ; ; 119
Disciplina	512.9
Soggetti	Group theory Combinatorics Number theory Mathematical optimization Algebra Group Theory and Generalizations Number Theory Discrete Optimization General Algebraic Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Note generali	Includes index.
Nota di contenuto	1 Theory review -- 1.1 Fundamentals -- 1.2 Combinatorics -- 1.3 Integers -- 1.4 Groups -- 1.5 Rings -- 1.6 Fields -- 2 Exercises -- 2.1 Sequences -- 2.2 Combinatorics -- 2.3 Modular arithmetic -- 2.4 Groups -- 2.5 Rings and Fields -- 3 Solutions -- 3.1 Sequences -- 3.2 Combinatorics -- 3.3 Modular arithmetic -- 3.4 Groups -- 3.5 Rings and Fields.
Sommario/riassunto	This book, the first of two volumes, contains over 250 selected exercises in Algebra which have featured as exam questions for the Arithmetic course taught by the authors at the University of Pisa. Each exercise is presented together with one or more solutions, carefully written with consistent language and notation. A distinguishing feature of this book is the fact that each exercise is unique and requires some creative thinking in order to be solved. The themes covered in this volume are: mathematical induction, combinatorics, modular

arithmetic, Abelian groups, commutative rings, polynomials, field extensions, finite fields. The book includes a detailed section recalling relevant theory which can be used as a reference for study and revision. A list of preliminary exercises introduces the main techniques to be applied in solving the proposed exam questions. This volume is aimed at first year students in Mathematics and Computer Science.
