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   Descrizione fisica   1 online resource (XII, 112 p.)

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   Soggetti   Group theory
                       Group Theory and Generalizations

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Bibliographic Level Mode of Issuance: Monograph

   Nota di bibliografia   Includes bibliographical references and index.

   Nota di contenuto   Rings -- Homomorphisms and Ideals -- Quotient Rings -- Polynomial
                       Rings over Fields -- Prime Ideals and Maximal Ideals -- Finite Fields --
                       Irreducible Polynomials -- Classical Formulas -- Splitting Fields --
                       Solvability by Radicals -- The Galois Group -- Primitive Roots of Unity
                       -- Insolvability of the Quintic -- Independence of Characters -- Galois
                       Extensions -- Fundamental Theorem of Galois Theory -- Applications
                       -- Galois's Great Theorem -- Discriminants -- Galois Groups of
                       Quadratics, Cubics, and Quartics -- Epilogue -- Appendix 1. Group
                       Theory Dictionary -- Appendix 2. Group Theory Used in the Text --
                       Appendix 3. Ruler-Compass Constructions -- Appendix 4. Old-
                       fashioned Galois Theory -- References.

   Sommario/riassunto   This text offers a clear, efficient exposition of Galois Theory with
                       exercises and complete proofs. Topics include: Cardano's formulas; the
                       Fundamental Theorem; Galois' Great Theorem (solvability for radicals of
                       a polynomial is equivalent to solvability of its Galois Group); and
                       computation of Galois group of cubics and quartics. There are
                       appendices on group theory and on ruler-compass constructions.
                       Developed on the basis of a second-semester graduate algebra course,
                       following a course on group theory, this book will provide a concise
                       introduction to Galois Theory suitable for graduate students, either as a
                       text for a course or for study outside the classroom.