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Autore	Alaca Saban <1964->
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Descrizione fisica	1 online resource (xvii, 428 pages) : digital, PDF file(s)
Altri autori (Persone)	WilliamsKenneth S
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Soggetti	Algebraic number theory Number theory
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Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 423-424) and index.
Nota di contenuto	Integral domains -- Euclidean domains -- Noetherian domains -- Elements integral over a domain -- Algebraic extensions of a field -- Algebraic number fields -- Integral bases -- Dedekind domains -- Norms of ideals -- Decomposing primes in a number field -- Units in real quadratic fields -- The ideal class group -- Dirichlet's unit theorem -- Applications to diophantine equations.
Sommario/riassunto	Algebraic number theory is a subject which came into being through the attempts of mathematicians to try to prove Fermat's last theorem and which now has a wealth of applications to diophantine equations, cryptography, factoring, primality testing and public-key cryptosystems. This book provides an introduction to the subject suitable for senior undergraduates and beginning graduate students in mathematics. The material is presented in a straightforward, clear and elementary fashion, and the approach is hands on, with an explicit computational flavour. Prerequisites are kept to a minimum, and numerous examples illustrating the material occur throughout the text. References to suggested reading and to the biographies of

mathematicians who have contributed to the development of algebraic number theory are given at the end of each chapter. There are over 320 exercises, an extensive index, and helpful location guides to theorems and lemmas in the text.

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