

1. Record Nr.	UNINA9910465224303321
Autore	Dudley Underwood
Titolo	A guide to elementary number theory [[electronic resource] / / Underwood Dudley
Pubbl/distr/stampa	[Washington, D.C.], : Mathematical Association of America, c2009
ISBN	0-88385-918-1
Descrizione fisica	1 online resource (x, 141 pages) : digital, PDF file(s)
Collana	Dolciani mathematical expositions ; ; no. 41 MAA guides ; ; no. 5
Disciplina	512.7/2
Soggetti	Number theory Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Greatest common divisors -- Unique factorization -- Linear Diophantine equations -- Congruences -- Linear congruences -- The Chinese remainder theorem -- Fermat's theorem -- Wilson's theorem -- The number of divisors of an integer -- The sum of the divisors of an integer -- Amicable numbers -- Perfect numbers -- Euler's theorem and function -- Primitive roots and orders -- Decimals -- Quadratic congruences -- Gauss's lemma -- The quadratic reciprocity theorem -- The Jacobi symbol -- Pythagorean triangles -- $x + y$ [not equal] z -- Sums of two squares -- Sums of three squares -- Sums of four squares -- Waring's problem -- Pell's equation -- Continued fractions -- Multigrades -- Carmichael numbers -- Sophie Germain primes -- The group of multiplicative functions -- Bounds for $\pi(x)$ -- The sum of the reciprocals of the primes -- The Riemann hypothesis -- The prime number theorem -- The abc conjecture -- Factorization and testing for primes -- Algebraic and transcendental numbers -- Unsolved problems.
Sommario/riassunto	"A Guide to Elementary Number Theory is a 140-page exposition of the topics considered in a first course in number theory. It is intended for those who may have seen the material before but have half-forgotten it, and also for those who may have misspent their youth by not having a course in number theory and who want to see what it is about without having to wade through traditional texts, some of which approach 500

pages in length. It will be especially useful to graduate students preparing for qualifying exams. Though Plato did not quite say, "He is unworthy of the name of man who does not know which integers are the sums of two squares," he came close. This guide can make everyone more worthy"--P. [4] of cover.
