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Autore	Dudley Underwood
Titolo	A guide to elementary number theory / / Underwood Dudley [[electronic resource]]
Pubbl/distr/stampa	Washington : , : Mathematical Association of America, , 2009
ISBN	0-88385-918-1
Descrizione fisica	1 online resource (x, 141 pages) : digital, PDF file(s)
Collana	Dolciani Mathematical Expositions, ; v. 41 Dolciani mathematical expositions ; ; no. 41 MAA guides ; ; no. 5
Classificazione	SK 180
Disciplina	512.7/2
Soggetti	Number theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 02 Oct 2015).
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 -- $x + y \neq z$ -- 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	CHOICE Award winner! 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 a

traditional text, some of which approach 500 pages in length. It will be especially useful to graduate student preparing for the qualifying exams. Underwood Dudley received the Ph.D. degree (number theory) from the University of Michigan in 1965. He taught at the Ohio State University and at DePauw University, from which he retired in 2004. He is the author of three books on mathematical oddities, *The Trisectors*, *Mathematical Cranks*, and *Numerology* all published by the Mathematical Association of America. He has also served as editor of the *College Mathematics Journal*, the *Pi Mu Epsilon Journal*, and two of the Mathematical Association of America's book series.

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