The book was found

An Illustrated Theory Of Numbers

AN ILLUSTRATED THEORY OF NUMBERS

43

41

41

43

MARTIN H. WEISSMAN

AMS
American Mathematical Society
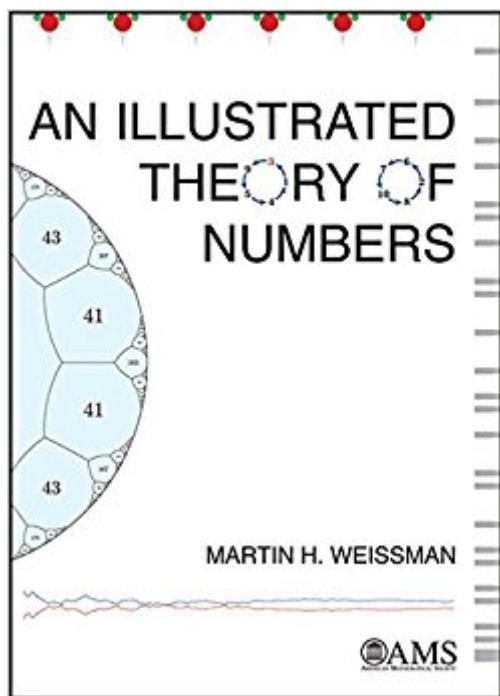
Synopsis

An Illustrated Theory of Numbers gives a comprehensive introduction to number theory, with complete proofs, worked examples, and exercises. Its exposition reflects the most recent scholarship in mathematics and its history. Almost 500 sharp illustrations accompany elegant proofs, from prime decomposition through quadratic reciprocity. Geometric and dynamical arguments provide new insights, and allow for a rigorous approach with less algebraic manipulation. The final chapters contain an extended treatment of binary quadratic forms, using Conway's topograph to solve quadratic Diophantine equations (e.g. Pell's equation) and to study reduction and the finiteness of class numbers. Data visualizations introduce the reader to open questions and cutting-edge results in analytic number theory such as the Riemann hypothesis, boundedness of prime gaps, and the class number 1 problem. Accompanying each chapter, historical notes curate primary sources and secondary scholarship to trace the development of number theory within and outside the Western tradition. Requiring only high school algebra and geometry, this text is recommended for a first course in elementary number theory, and to all mathematicians seeking a fresh perspective on an ancient subject.

Book Information

Hardcover: 323 pages

Publisher: American Mathematical Society (August 8, 2017)

Language: English

ISBN-10: 1470434938

ISBN-13: 978-1470434939

Product Dimensions: 1 x 8.5 x 11 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #264,839 in Books (See Top 100 in Books)   #67 in Books > Science & Math > Mathematics > Pure Mathematics > Number Theory   #3468 in Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

This is a meticulously written and stunningly laid-out book influenced not only by the classical masters of number theory like Fermat, Euler, and Gauss, but also by the work of Edward Tufte on data visualization. Assuming little beyond basic high school mathematics, the author covers a tremendous amount of territory, including topics like Ford circles, Conway's topographs, and

Zolotarev's lemma which are rarely seen in introductory courses. All of this is done with a visual and literary flair which very few math books even strive for, let alone accomplish.-- Matthew Baker, Georgia Institute of Technologyâ œAn Illustrated Theory of Numbersâ • is a textbook like none other I know; and not just a textbook, but a work of practical art. This book would be a delight to use in the undergraduate classroom, to give to a high school student in search of enlightenment, or to have on your coffee table, to give guests from the world outside mathematics a visceral and visual sense of the beauty of our subject.-- Jordan Ellenberg, University of Wisconsin-Madison, author of â œHow Not to Be Wrong: the Power of Mathematical Thinkingâ •Weissman's book represents a totally fresh approach to a venerable subject. Its choice of topics, superb exposition and beautiful layout will appeal to professional mathematicians as well as to students at all levels.-- Kenneth A. Ribet, University of California, Berkeley

Martin H. Weissman, University of California, Santa Cruz, CA.

Sacred Science of Numbers: A Series of Lecture Lessons Dealing with the Sacred Science of Numbers The Grapes of Math: How Life Reflects Numbers and Numbers Reflect Life Numbers Raging (Numbers Game Saga Book 3) Numbers Ignite (Numbers Game Saga Book 2) An Illustrated Theory of Numbers Music Theory: From Beginner to Expert - The Ultimate Step-By-Step Guide to Understanding and Learning Music Theory Effortlessly (Music Theory Mastery Book 1) Recursion Theory, Godel's Theorems, Set Theory, Model Theory (Mathematical Logic: A Course With Exercises, Part II) The Crime Numbers Game: Management by Manipulation (Advances in Police Theory and Practice) The Whole Truth About Whole Numbers: An Elementary Introduction to Number Theory Elementary Theory of Numbers (Dover Books on Mathematics) Contributions to the Founding of the Theory of Transfinite Numbers (Dover Books on Mathematics) An Introduction to the Theory of Numbers Introduction to the Theory of Numbers Contributions to the Founding of the Theory of Transfinite Numbers Illustrated Thesaurus (Usborne Illustrated Dictionaries) (Usborne Illustrated Dictionaries) Immaterialism: Objects and Social Theory (Theory Redux) Making Design Theory (Design Thinking, Design Theory) Mastering the Ukulele: Ukulele Techniques and Theory for Beginners (Ukulele Theory, Ukulele Songbook Book 1) Garage Band Theory â " GBTool 17 Triad Inversions for Guitar, Mandolin and Banjo: Music theory for non music majors, livingroom pickers * working musicians ... Tools the Pro's Use to Play by Ear Book 18) Contemporary Music Theory - Level One: A Complete Harmony and Theory Method for the Pop and Jazz Musician

Contact Us

DMCA

Privacy

FAQ & Help