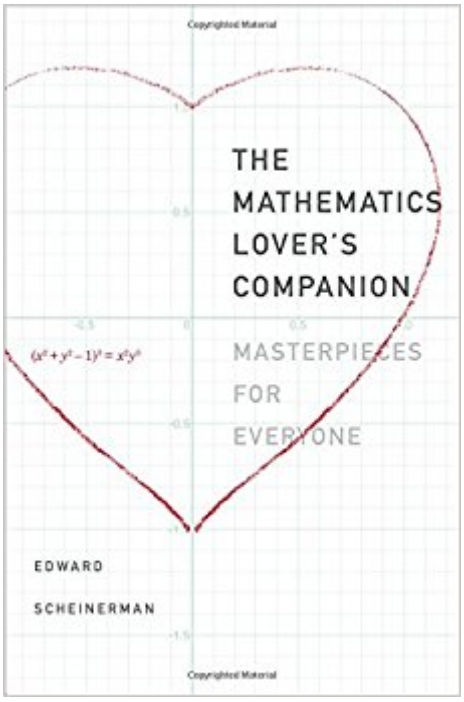
The Mathematics LoverÃ¢â‚¬â„¢s Companion: Masterpieces For Everyone



Synopsis

Twenty-three mathematical masterpieces for exploration and enlightenment How can a shape have more than one dimension but fewer than two? What is the best way to elect public officials when more than two candidates are vying for the office? Is it possible for a highly accurate medical test to give mostly incorrect results? Can you tile your floor with regular pentagons? How can you use only the first digit of sales numbers to determine if your accountant is lying? Can mathematics give insights into free will? Ã Â Edward Scheinerman, an accomplished mathematician and enthusiastic educator, answers all these questions and more in this book, a collection of mathematical masterworks. In bite-sized chapters that require only high school algebra, he invites readers to try their hands at solving mathematical puzzles and provides an engaging and friendly tour of numbers, shapes, and uncertainty. The result is an unforgettable introduction to the fundamentals and pleasures of thinking mathematically.

Book Information

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Customer Reviews

"Twenty-three masterworks whose analysis Scheinerman presents with rigor and accessibility."Ã¢â ¬â •James Ryerson, New York Times Book Review"This delightful book is designed to allow non-mathematicians to share in the joy of mathematical proofs. . . . While every mathematician will be familiar with most of the proofs, the clear exposition can be enjoyed for its own sake."Ã¢â ¬â •Frederick Norwood, Mathematical Reviews Clippings"A great read for anyone who wants to learn what math really is, no prerequisites required. And those of us in the field are reminded of what first drew us to it."Ã¢â ¬â •Maria Chudnovsky, Princeton University and 2012 MacArthur Fellow"An accessible presentation of some of the most compelling and beautiful ideas of

mathematics. Scheinerman demonstrates the diversity and liveliness of the subject in a friendly and inviting way."Ã¢â ¬â •Susan Jane Colley, Oberlin College and Editor, The American Mathematical Monthly"In this well-written book, the reader is taken on a fascinating journey across a broad landscape of beautiful mathematics."Ã¢â ¬â •Ron Graham, author of Magical Mathematics"A first-rate mathematician and expositor, Scheinerman takes us on a guided tour of great mathematical ideas. Written with clarity and humor, The Mathematics Lover's Companion will appeal to a wide audience."Ã¢â ¬â •Arthur Benjamin, The Magic of Math: Solving for x and Figuring Out Why"An elegant sampler of many beautiful and interesting mathematical topics. This could become one of the best books available for a popular audience interested in what mathematics really is."Ã¢â ¬â •Jayadev Athreya, University of Washington

Edward Scheinerman is professor of applied mathematics and vice dean for engineering education at Johns Hopkins University. He has twice won the Mathematical Association of AmericaÃ¢â ¬â„¢s Ford Award for excellent mathematical writing.

I really enjoyed this work. The author promises in the preface to provide surprising, not especially well know ideas which highlight the idea of proof and have practical applications but require only a high school math background. A tall order, but mostly accomplished. 23 ideas from number theory, geometry, and probability defined with illuminating examples and some gestures towards how a proof would go. (Not that many applications are discussed.) This is a great way to get interested in the topics covered. It is the kind of book I wish I had in late high school or early college when I was introduced to calculus and linear algebra in a very abstract way.

As a math enthusiast, itÃƒÂ¢Ã â ¬Ã â„¢s difficult for me to resist buying new math books, especially popular ones that are highly rated. But I do have my preferences regarding math topics, and number theory is definitely not one of them. This book does contain a number of chapters on number theory subjects. However, I found the presentations to be so well done that I enjoyed them as much as the other topics discussed in the book.The book contains 23 chapters, each on a different mathematical subject ÃƒÂ¢Ã â ¬Ã â œ some practical, others less so. The writing style is clear, lively, friendly, authoritative, highly accessible and particularly captivating ÃƒÂ¢Ã â ¬Ã â œ overall, for me, a page turner! Sure, as a math buff, I did find several explanations/derivations extremely elementary (and unnecessary), but IÃƒÂ¢Ã â ¬Ã â„¢m sure that they could be useful to those who are new to the field, thus broadening the bookÃƒÂ¢Ã â ¬Ã â„¢s readership. And these

did not take anything away from my reading enjoyment. In addition, I did learn several rather interesting tidbits. Because of its diversity of topics, I believe that there should be several items in here to please just about everyone. The bookÃƒÂ¢Ã â ¬Ã â„¢s title and subtitle have, in my opinion, been well chosen.I thoroughly enjoyed this wonderful book, and I recommend it to seasoned math enthusiasts (even if only as an entertaining review of familiar topics) as well as those who want to learn math in a most painless and enjoyable way.

Our mathematics instructor is loving this book, and says it will give him new and exciting things to speak of during lectures.

(Contemporary Mathematics)