

The book was found

The Colossal Book Of Mathematics: Classic Puzzles, Paradoxes, And Problems





Synopsis

No amateur or math authority can be without this ultimate compendium from America's best-loved mathematical expert. Whether discussing hexaflexagons or number theory, Klein bottles or the essence of "nothing," Martin Gardner has single-handedly created the field of "recreational mathematics." The Colossal Book of Mathematics collects together Gardner's most popular pieces from his legendary "Mathematical Games" column, which ran in Scientific American for twenty-five years. Gardner's array of absorbing puzzles and mind-twisting paradoxes opens mathematics up to the world at large, inspiring people to see past numbers and formulas and experience the application of mathematical principles to the mysterious world around them. With articles on topics ranging from simple algebra to the twisting surfaces of Mobius strips, from an endless game of Bulgarian solitaire to the unreachable dream of time travel, this volume comprises a substantial and definitive monument to Gardner's influence on mathematics, science, and culture. In its twelve sections, The Colossal Book of Math explores a wide range of areas, each startlingly illuminated by Gardner's incisive expertise. Beginning with seemingly simple topics, Gardner expertly guides us through complicated and wondrous worlds: by way of basic algebra we contemplate the mesmerizing, often hilarious, linguistic and numerical possibilities of palindromes; using simple geometry, he dissects the principles of symmetry upon which the renowned mathematical artist M. C. Escher constructs his unique, dizzying universe. Gardner, like few thinkers today, melds a rigorous scientific skepticism with a profound artistic and imaginative impulse. His stunning exploration of "The Church of the Fourth Dimension," for example, bridges the disparate worlds of religion and science by brilliantly imagining the spatial possibility of God's presence in the world as a fourth dimension, at once "everywhere and nowhere." With boundless wisdom and his trademark wit, Gardner allows the reader to further engage challenging topics like probability and game theory which have plagued clever gamblers, and famous mathematicians, for centuries. Whether debunking Pascal's wager with basic probability, making visual music with fractals, or uncoiling a "knotted doughnut" with introductory topology, Gardner continuously displays his fierce intelligence and gentle humor. His articles confront both the comfortingly mundanea •"Generalized Ticktacktoe" and "Sprouts and Brussel Sprouts" a •and the quakingly abstracta •"Hexaflexagons," "Nothing," and "Everything." He navigates these staggeringly obscure topics with a deft intelligence and, with addendums and suggested reading lists, he informs these classic articles with new insight. Admired by scientists and mathematicians, writers and readers alike, Gardner's vast knowledge and burning curiosity reveal themselves on every page. The culmination of a lifelong devotion to the wonders of mathematics, The Colossal Book of Mathematics is the largest and most comprehensive math book

ever assembled by Gardner and remains an indispensable volume for the amateur and expert alike.

Book Information

Hardcover: 736 pages Publisher: W. W. Norton & Company; First Edition edition (September 17, 2001) Language: English ISBN-10: 0393020231 ISBN-13: 978-0393020236 Product Dimensions: 7.5 x 1.8 x 9.6 inches Shipping Weight: 3 pounds (View shipping rates and policies) Average Customer Review: 4.4 out of 5 stars 15 customer reviews Best Sellers Rank: #219,866 in Books (See Top 100 in Books) #65 in Books > Humor & Entertainment > Puzzles & Games > Math Games #200 in Books > Humor & Entertainment > Puzzles & Games > Logic & Brain Teasers #1276 in Books > Science & Math > History & Philosophy

Customer Reviews

This weighty collection, containing 50 of what the Annotated Alice annotator and popular science journalist considers his best Scientific American "Mathematical Games" columns, is sure to please the relatively small but intensely loyal coterie of Gardner fans. Arranged in 12 broad categories (arithmetic and algebra, plane geometry, topology, infinity, etc.), these pieces cover subjects that will delight recreational math buffs, such as Penrose tiles, hypercubes, Klein bottles and fractal music. In addition to an up-to-date bibliography, each section includes a new, sometimes lengthy addendum, which should be the main hook for those who already own the 15 volumes of Gardner's complete Scientific American columns. While books on math for general audiences by authors such as Amir Aczel have been in vogue of late, they've tended to focus on personalities and to avoid equations. Since this collection is filled with problems and expressions (illustrated with 320 line drawings) that require solving with pencil and paper, its appeal should be mainly limited to puzzle nuts, but Gardner's elegant style could draw in new aficionados. An enemy of charlatarry and pretension, who appreciates the beauty and complexity of language as well as numbers (and still actively writing at age 86), Gardner remains a model of clear prose, understated wit and intellectual honesty. Copyright 2001 Cahners Business Information, Inc.

â œFor more than half a century, Martin Gardner has been the single brightest beacon defending

rationality and good science. . . . He is also one of the most brilliant men and gracious writers I have known.â • - Stephen Jay Gould

This is an excellent collection of 50 of Martin Gardner's Scientific American "Mathematical Games" columns that he wrote over a number of years. Gardner wrote his column for 25 years and always managed to find an idea involving mathematics -- sometimes obscure, sometimes not -- and make it very understandable and very interesting through very clear (and often witty) writing combined with excellent illustrations (reproduced here)by Scientific American. Although these articles have been previously reproduced in the 15 collections, this collection is valuable in that Gardner (now in his mid-eighties and still writing away) has added addenda to his earlier articles that nicely update them. Although some people might think that "recreational mathematics" is a contradiction of terms, Gardner's insight and excellent writing style really do make mathematics enjoyable. At one level, the book can be thought of as a collection of puzzles, in that Gardner often uses a puzzle or otherwise poses a guestion to ask how a problem can be solved. The book goes way beyond a collection of puzzles, in that Gardner really provides an overview of mathematics concepts involved and goes beyond the simple solution of the puzzle to give the reader a sense of particular concepts in mathematics (e.g., topology). His approach really makes mathematics guite interesting. I am sure that Gardner's original column got many people (including myself) interested in mathematics, and I hope that this collection will help a new group of readers to develop and maintain curiosity regarding mathematics and its applications. It is, for example, something that teachers might want to refer their students to. If you haven't read other books by Gardner, this is a very good place to start -- I would also recommend his essay collection "The Night is Large" that shows his amazing range of interests (of which mathematics is one part).

I've bought this book several times for students who are particularly interested in math, and it's always a big hit. Strongly recommend.

Martin Gardner is the foremost writer on recreational mathematics. Other reviewers will shed more light on his pedigree; I wish only to add that he is a great writer per se, and that the sheer size and range of this book, coupled with its excellent bibliographies (for each chapter!) and index, make it ideal reading and a great starting point for depper explorations into the mathematical universe.

I have never read any books on "recreational mathematics" so didn't know quite what to expect from

this book--in general I found it entertaining and interesting, with a broad range of topics, including physics, statistics, logical paradoxes, higher dimensions, etc. You don't really have to be a math person to enjoy this book; almost anyone interested in stimulating topics should find at least parts of it interesting. The book consists of numerous short articles with bibliographies for each. If one article bores you, move on to the next... I found the articles on statistics, logical paradoxes, a 2D Universe (Planiverse) and others very interesting and enjoyable. It is important to understand that this book is not a puzzle book per se; although almost every articles includes some task for hard-core readers to perform ("Prove that...", or "How many..."), it is really intended as reading material.A few negatives: the articles almost all seem to have been written in the 1950s or 1960s (!); each article has an addendum which attempts to bring it up to date. Although this didn't matter that much to me, since I have never read anything on recreational mathematics, I doubt that much of the material would be new for anyone that reads the topic regularly. Similarly, it would have been more interesting to discover what topics are currently "hot" in this field. Also, the author spends too much time for my taste on trivial mathematical games such as folding paper into different shapes rather than on really thought-provoking mathematical topics (purely a personal preference, I suppose).

awesome book, a certain classic.

I grew up with Martin Gardner's Mathematical Games section in Scientific American. If you, too, enjoyed his puzzles, paradoxes and problems, this book is a must.

Very good book.

Enjoyed the book

Download to continue reading...

The Colossal Book of Mathematics: Classic Puzzles, Paradoxes, and Problems Star Wars Miniatures AT-At Imperial Walker Colossal Pack (1 Colossal Figure & Battle Grid) There Are Two Errors in the the Title of This Book, Revised and Expanded (Again): A Sourcebook of Philosophical Puzzles, Problems, and Paradoxes The Colossal Book of Short Puzzles and Problems Prostate Problems Home Remedies, How To Fight Prostate Problems At Home, Get Rid Of Prostate Problems Fast!: Back On Track - Fighting Prostate Problems At Home Go!Games Super Colossal Book of Word Search: 365 Great Puzzles Puzzles, Paradoxes, and Problem Solving: An Introduction to Mathematical Thinking Practical Problems in Mathematics for Heating and Cooling Technicians (Practical Problems In Mathematics Series) Practical Problems in Mathematics for Welders (Practical Problems In Mathematics Series) Practical Problems in Mathematics for Electricians (Practical Problems In Mathematics Series) Human Resource Management in Public Service: Paradoxes, Processes, and Problems An Introduction to Analytic Philosophy: Paradoxes, Arguments and Contemporary Problems Bible Brain Teasers for Adults (4 Book Set includes:Bible Crossword Puzzles;Bible Games;Bible Quizzes & Puzzles;Bible Word Search Puzzles) The New York Times Monday Through Friday Easy to Tough Crossword Puzzles: 50 Puzzles from the Pages of The New York Times (New York Times Crossword Puzzles) 100 Math Brainteasers (Grade 7, 8, 9, 10). Arithmetic, Algebra and Geometry Brain Teasers, Puzzles, Games and Problems with Solutions: Math olympiad contest problems for elementary and middle schools How trace element selenium affects men's health: Discover how selenium can affect: prostate problems, eczema problems, asthma breathing, and 9 other health problems Too Good To Be True: The Colossal Book of Urban Legends (Revised and with a new chapter) Too Good to Be True: The Colossal Book of Urban Legends Colossal Anime Coloring Book: Volume 2 Colossal Anime Coloring Book: Volume

1

Contact Us

DMCA

Privacy

FAQ & Help