Winning Ways for Your Mathematical Plays, Volume 4

Elwyn R. Berlekamp, John H. Conway, Richard K. Guy
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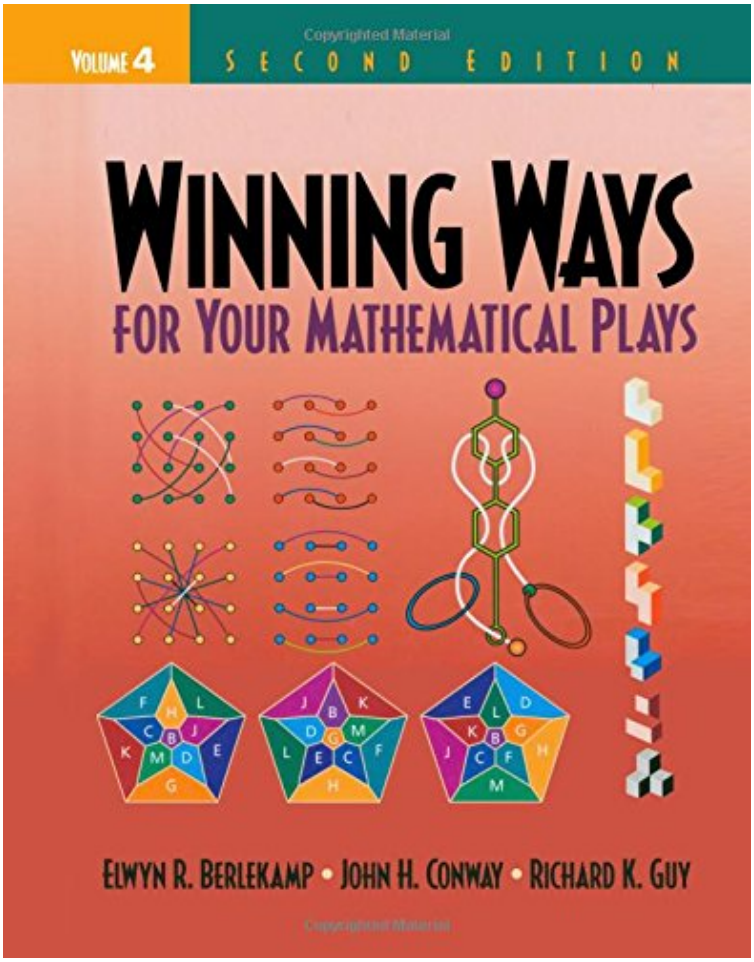

#822669 in Books A. K. Peters 2004-04-01 2004-03-30Original language:EnglishPDF # 1 9.25 x .41 x 7.25l, .82 #File Name: 1568811446224 pages | File size: 41.Mb

Elwyn R. Berlekamp, John H. Conway, Richard K. Guy : Winning Ways for Your Mathematical Plays, Volume 4 before purchasing it in order to gage whether or not it would be worth my time, and all praised Winning Ways for Your Mathematical Plays, Volume 4:

12 of 12 people found the following review helpful. Great reference for one person puzzles and gamesBy George BellThe new edition of these classic volumes has been completely reorganized, and this volume now contains mostly one person games or puzzles, such as peg solitaire, Soma, Rubik's Cube, mechanical wire and string puzzles, sliding block puzzles, magic squares, and life. The book is very readable and requires no mathematical background. However, this is no lightweight watered-down book and some sections of the books could take you months to understand completely (try the SOMA map or century puzzle map that appears in the Extras). Fortunately you can just skip over these parts if you don't want to dig down to this level of detail.I have only looked briefly at the other volumes, but I believe this volume "stands on it's own" more so than volumes 2 3. Be warned, however, that there are several concepts (such as "nim addition" that you will need the previous volumes to understand).Conway's game of Life is the

subject of the last chapter, perhaps the most interesting chapter in the book, and that which has probably been most changed since the last edition. Still, they could easily have expanded this chapter into a whole volume, and looking at the internet it is already out of date.Beware that the figures on the covers of these volumes DO NOT necessarily correspond to what is inside. For example, Volume 3 shows peg solitaire on the cover but the subject itself is all in Volume 4!4 of 6 people found the following review helpful. The math is Kind of HiddenBy John MatlockThis is volume four in the series, and it starts with page 801. Do you need to read the first three volumes first? Well, if you want to. The authors would get more royalties if you buy them. Do you need to in order to understand this volume? Generally speaking -- No. Only in a couple of areas might it help.So, what do we have here?A discussion of games, such as Rubik's Cube that you can play, and that they give instructions on how to make it come together. But don't get to thinking that this is all simple. Underneath it all, this is a fairly serious book on game theory, but the mathematics behind it are hidden.Beyond the cube there are several other games discussed in this volume, some very beiefly, some getting a lot more attention - The last chapter in the book on the Game of Life gets some 35 pages.As much as anything else, the authors witty writing style is a rare treat on a book like this.

In the quarter of a century since three mathematicians and game theorists collaborated to create Winning Ways for Your Mathematical Plays, the book has become the definitive work on the subject of mathematical games. Now carefully revised and broken down into four volumes to accommodate new developments, the Second Edition retains the original's wealth of wit and wisdom. The authors' insightful strategies, blended with their witty and irreverent style, make reading a profitable pleasure. In Volume 4, the authors present a Diamond of a find, covering one-player games such as Solitaire.

" ""The authors' insightful strategies, blended with their witty and irreverent style, make reading a profitable pleasure."" -N/ A, L'Enseignement Mathematique, December 2004 ""There are thoguht-provoking insights and implicit challenges for the reader on every page!"" -Nick Lord, The Mathematical Gazette, March 2005 ""Winning Ways is an absolute must have for those who are interested in mathematical game theory. It is sure to please any fan of recreational mathematics or simply anyone who is interested in games and how to play them well."" -Jacob McMillen, Math Horizons, November 2005 ""This excellently written book is not just a comprehensive monograph on recreational mathematics. It presents various mathematical concepts in a natural (and sometimes humorous) way that would also be understandable to a reader without a strong mathematical background."" -EMS Newsletter, June 2005 ""This is a book for dipping and savouring. Always stimulating and enjoyable, it touches on some deep and significant problems."" -Edward J. Barbeau, Zentralblatt MATH, October 2006"