The book was found

On Numbers And Games





Synopsis

ONAG, as the book is commonly known, is one of those rare publications that sprang to life in a moment of creative energy and has remained influential for over a quarter of a century. Originally written to define the relation between the theories of transfinite numbers and mathematical games, the resulting work is a mathematically sophisticated but eminently enjoyable guide to game theory. By defining numbers as the strengths of positions in certain games, the author arrives at a new class, the surreal numbers, that includes both real numbers and ordinal numbers. These surreal numbers are applied in the author's mathematical analysis of game strategies. The additions to the Second Edition present recent developments in the area of mathematical game theory, with a concentration on surreal numbers and the additive theory of partizan games.

Book Information

Hardcover: 242 pages Publisher: A K Peters/CRC Press; 2nd edition (December 11, 2000) Language: English ISBN-10: 1568811276 ISBN-13: 978-1568811277 Product Dimensions: 6.3 x 0.7 x 9.3 inches Shipping Weight: 1 pounds (View shipping rates and policies) Average Customer Review: 4.4 out of 5 stars Â See all reviews (5 customer reviews) Best Sellers Rank: #387,245 in Books (See Top 100 in Books) #102 in Books > Science & Math > Evolution > Game Theory #2676 in Books > Science & Math > Mathematics > Applied #3702 in Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

Boy, you wanna talk about your _cool_ books. I read this one twenty years ago and never quite got over it. Georg Cantor sure opened a can of worms with all that infinity stuff.John Horton Conway is probably best known as the creator/discoverer of the computer game called "Life," with which he re-founded the entire field of cellular automata. What he does in this book is the _other_ thing he's best known for: he shows how to construct the "surreal numbers" (they were actually named by Donald Knuth).Conway's method employs something like Dedekind cuts (the objects Richard Dedekind used to construct the real numbers from the rationals), but more general and much more powerful. Conway starts with the empty set and proceeds to construct the entire system of surreals, conjuring them forth from the void using a handful of recursive rules.The idea is that we imagine

numbers created on successive "days". On the first day, there's 0; on the next, -1 and +1; on the next, 2, 1/2, -1/2, and -2; on the next, 3, 3/4, 1/4, -1/4, -3/4, and -3; and so on. In the first countably-infinite round, we get all the numbers that can be written as a fraction whose denominator is a power of two (including, obviously, all the whole numbers). We can get as close to any other real number as we like, but they haven't actually been created yet at this point.But we're just getting started. Once we get out past the first infinity, things really get weird. By the time we're through, which technically is "never," Conway's method has generated not only all the real numbers but way, way more besides (including more infinities than you've ever dreamed of).

Download to continue reading...

Warriors Word Scramble: Word Scramble Games - Word Search, Word Puzzles And Word Scrambles (Word Games, Brain Games, Word Search, Word Search Games, Word ... Scramble, Word Scrabble, Unscramble Word) Hoyle's Rules of Games: The Essential Family Guide to Card Games, Board Games, Parlor Games, New Poker Variations, and More The Game Inventor's Guidebook: How to Invent and Sell Board Games, Card Games, Role-Playing Games, & Everything in Between! LOTTERY NUMBERS: 7 Numbers That WIN Most Often On Numbers and Games Here's Looking at Euclid: From Counting Ants to Games of Chance - An Awe-Inspiring Journey Through the World of Numbers Toy Making and Toy Games: How To Make Your Own Simple Wooden & Paper Toys and Easy to Play Games - Suitable for Toddlers, Kids and Adults! Brain Games for Dogs: Training, Tricks and Activities for your Dog's Physical and Mental wellness(Dog training, Puppy training, Pet training books, Puppy ... games for dogs, How to train a dog Book 1) Indoor Action Games for Elementary Children: Active Games and Academic Activities for Fun and Fitness How to Win Games and Beat People: Demolish Your Family and Friends at over 30 Classic Games with Advice from an International Array of Experts The Alternative Bride's Guide to Wedding Games: 111+ games for your reception, bridal shower, and more! The Best Bridal Shower Party Games & Activities, #1 (Party Games and Activities) Video Games Memes: Funny Video Games Memes, Jokes and Funny Pictures! (Lol Memes for Gamers) Nintendo, COD, Clash of Clans, Super Mario Memes plus more! Hoyle's Modern Encyclopedia of Card Games: Rules of All the Basic Games and Popular Variations The Card Games Bible: Over 150 Games and Tricks The Biggest Book of Games for One Ever!: Over 500 Games of Luck, Skill and Patience for Players of a Solitary Disposition The Step-By-Step Guide to Playing World?s Best 250 Card Games: Including bridge, poker, family games and solitaires 500 Short Chess Games Of Grand Masters: Learn the beauty of tricks and traps from short games collection Dice Games New and Old: How to Play Dice Games -Over 50 Including Craps 1996 Olympic Games Countdown: The Official Book of Olympic Games

Pin Collecting with a Special Two-year Calendar

<u>Dmca</u>