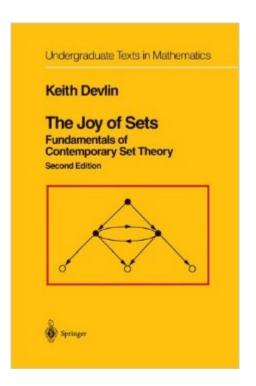
## The book was found

# The Joy Of Sets: Fundamentals Of Contemporary Set Theory (Undergraduate Texts In Mathematics)





# **Synopsis**

This text covers the parts of contemporary set theory relevant to other areas of pure mathematics. After a review of "naà ve" set theory, it develops the Zermelo-Fraenkel axioms of the theory before discussing the ordinal and cardinal numbers. It then delves into contemporary set theory, covering such topics as the Borel hierarchy and Lebesgue measure. A final chapter presents an alternative conception of set theory useful in computer science.

## **Book Information**

Series: Undergraduate Texts in Mathematics

Hardcover: 194 pages

Publisher: Springer; 2nd edition (June 24, 1994)

Language: English

ISBN-10: 0387940944

ISBN-13: 978-0387940946

Product Dimensions: 6.1 x 0.6 x 9.2 inches

Shipping Weight: 15.5 ounces (View shipping rates and policies)

Average Customer Review: 3.9 out of 5 stars Â See all reviews (7 customer reviews)

Best Sellers Rank: #591,907 in Books (See Top 100 in Books) #70 in Books > Science & Math > Mathematics > Pure Mathematics > Set Theory #297 in Books > Science & Math > Mathematics

> Pure Mathematics > Logic #434 in Books > Computers & Technology > Databases & Big Data

> Data Processing

### **Customer Reviews**

Keith Devlin is one of those rare research mathematicians who is able to make recent advances in mathematics understandable and interesting to those whose mathematical education is obsolete or incomplete. I'm in the former category, having done my graduate work in pure math 50 years ago; although I've tried to keep up, constraints of time and other obligations have made it difficult. Most modern texts on set theory put the reader to sleep, either because they avoid the important parts ("Set Theory for Those who Don't Want to Know It") or because they employ a degree of formalism that is quite difficult to grasp ("Set Theory Derived by Pure Propositional Logic, Step by Step"). Devlin's book avoids both traps. He presents modern advanced material that illuminates the subject admirably, but is careful not to submerge the reader in overwhelming finicky details. His discussions of constructive set theory, of independence proofs in set theory, and of non-well-founded set theory, are the first ones I've seen that get me excited enough to put the book aside and start exploring

some of the implications on my own. If I search for anything about the book to criticize, I find only one very minor thing. The sequence of proofs that show "Zorn's Lemma", the Axiom of Choice, the well-ordering principle, "Tukey's Lemma", etc to be equivalent to one another as an addition to the traditional Zermolo-Frankel axioms would be clearer if prefaced by an intuitive discssion of why the various steps in the chain of reasoning "ought" to work as they do; such a discussion helped me a lot many years ago to internalize what's going on. But that comment is just a nit.

### Download to continue reading...

The Joy of Sets: Fundamentals of Contemporary Set Theory (Undergraduate Texts in Mathematics) Discrete Mathematics: Elementary and Beyond (Undergraduate Texts in Mathematics) Mathematics and Its History (Undergraduate Texts in Mathematics) Elementary Number Theory: Primes, Congruences, and Secrets: A Computational Approach (Undergraduate Texts in Mathematics) Classic Sports Card Sets: Best Sport Cards Sets From the 1950s and 1960s Light Science: Physics and the Visual Arts (Undergraduate Texts in Contemporary Physics) The Pleasures of Probability (Undergraduate Texts in Mathematics) Calculus with Vectors (Springer Undergraduate Texts in Mathematics and Technology) Conics and Cubics: A Concrete Introduction to Algebraic Curves (Undergraduate Texts in Mathematics) Ideals, Varieties, and Algorithms: An Introduction to Computational Algebraic Geometry and Commutative Algebra (Undergraduate Texts in Mathematics) Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) Elementary Topics in Differential Geometry (Undergraduate Texts in Mathematics) The Foundations of Geometry and the Non-Euclidean Plane (Undergraduate Texts in Mathematics) Topology (Undergraduate Texts in Mathematics) Basic Concepts of Algebraic Topology (Undergraduate Texts in Mathematics) Introduction to Partial Differential Equations (Undergraduate Texts in Mathematics) Real Mathematical Analysis (Undergraduate Texts in Mathematics) Understanding Analysis (Undergraduate Texts in Mathematics) Applied Linear Algebra and Matrix Analysis (Undergraduate Texts in Mathematics) Groups and Symmetry (Undergraduate Texts in Mathematics)

<u>Dmca</u>