

Set Theory (Studies in Logic: Mathematical **Logic and Foundations)**

By Kenneth Kunen



Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen

This book is designed for readers who know elementary mathematical logic and axiomatic set theory, and who want to learn more about set theory. The primary focus of the book is on the independence proofs. Most famous among these is the independence of the Continuum Hypothesis (CH); that is, there are models of the axioms of set theory (ZFC) in which CH is true, and other models in which CH is false. More generally, cardinal exponentiation on the regular cardinals can consistently be anything not contradicting the classical theorems of Cantor and König. The basic methods for the independence proofs are the notion of constructibility, introduced by Gödel, and the method of forcing, introduced by Cohen. This book describes these methods in detail, verifi es the basic independence results for cardinal exponentiation, and also applies these methods to prove the independence of various mathematical questions in measure theory and general topology. Before the chapters on forcing, there is a fairly long chapter on "infi nitary combinatorics". This consists of just mathematical theorems (not independence results), but it stresses the areas of mathematics where set-theoretic topics (such as cardinal arithmetic) are relevant. There is, in fact, an interplay between infi nitary combinatorics and independence proofs. Infi nitary combinatorics suggests many set-theoretic questions that turn out to be independent of ZFC, but it also provides the basic tools used in forcing arguments. In particular, Martin's Axiom, which is one of the topics under infi nitary combinatorics, introduces many of the basic ingredients of forcing.



Download Set Theory (Studies in Logic: Mathematical Logic a ...pdf



Read Online Set Theory (Studies in Logic: Mathematical Logic ...pdf

Set Theory (Studies in Logic: Mathematical Logic and Foundations)

By Kenneth Kunen

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen

This book is designed for readers who know elementary mathematical logic and axiomatic set theory, and who want to learn more about set theory. The primary focus of the book is on the independence proofs. Most famous among these is the independence of the Continuum Hypothesis (CH); that is, there are models of the axioms of set theory (ZFC) in which CH is true, and other models in which CH is false. More generally, cardinal exponentiation on the regular cardinals can consistently be anything not contradicting the classical theorems of Cantor and König. The basic methods for the independence proofs are the notion of constructibility, introduced by Gödel, and the method of forcing, introduced by Cohen. This book describes these methods in detail, verifi es the basic independence results for cardinal exponentiation, and also applies these methods to prove the independence of various mathematical questions in measure theory and general topology. Before the chapters on forcing, there is a fairly long chapter on "infi nitary combinatorics". This consists of just mathematical theorems (not independence results), but it stresses the areas of mathematics where set-theoretic topics (such as cardinal arithmetic) are relevant. There is, in fact, an interplay between infi nitary combinatorics and independence proofs. Infi nitary combinatorics suggests many set-theoretic questions that turn out to be independent of ZFC, but it also provides the basic tools used in forcing arguments. In particular, Martin's Axiom, which is one of the topics under infi nitary combinatorics, introduces many of the basic ingredients of forcing.

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen Bibliography

Sales Rank: #678309 in BooksBrand: Brand: College Publications

Published on: 2011-11-02Original language: English

• Number of items: 1

• Dimensions: 9.21" h x .84" w x 6.14" l, 1.27 pounds

• Binding: Paperback

• 412 pages

Download Set Theory (Studies in Logic: Mathematical Logic a ...pdf

Read Online Set Theory (Studies in Logic: Mathematical Logic ...pdf

Download and Read Free Online Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen

Editorial Review

Users Review

From reader reviews:

Randy Johnson:

Do you have favorite book? If you have, what is your favorite's book? E-book is very important thing for us to find out everything in the world. Each book has different aim or maybe goal; it means that book has different type. Some people truly feel enjoy to spend their a chance to read a book. They can be reading whatever they take because their hobby will be reading a book. How about the person who don't like studying a book? Sometime, individual feel need book if they found difficult problem or even exercise. Well, probably you will require this Set Theory (Studies in Logic: Mathematical Logic and Foundations).

Patricia McGuire:

The reserve with title Set Theory (Studies in Logic: Mathematical Logic and Foundations) posesses a lot of information that you can study it. You can get a lot of help after read this book. This book exist new information the information that exist in this book represented the condition of the world at this point. That is important to yo7u to understand how the improvement of the world. This particular book will bring you in new era of the the positive effect. You can read the e-book on your own smart phone, so you can read the idea anywhere you want.

Edward Cooley:

People live in this new morning of lifestyle always aim to and must have the spare time or they will get large amount of stress from both everyday life and work. So, if we ask do people have free time, we will say absolutely without a doubt. People is human not a robot. Then we question again, what kind of activity do you possess when the spare time coming to you of course your answer will certainly unlimited right. Then ever try this one, reading ebooks. It can be your alternative inside spending your spare time, typically the book you have read is actually Set Theory (Studies in Logic: Mathematical Logic and Foundations).

Julie Bailey:

Within this era which is the greater particular person or who has ability to do something more are more special than other. Do you want to become one of it? It is just simple way to have that. What you have to do is just spending your time almost no but quite enough to have a look at some books. One of the books in the top list in your reading list is definitely Set Theory (Studies in Logic: Mathematical Logic and Foundations). This book and that is qualified as The Hungry Inclines can get you closer in turning into precious person. By looking upward and review this publication you can get many advantages.

Download and Read Online Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen #PSX7JR4DB9N

Read Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen for online ebook

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen books to read online.

Online Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen ebook PDF download

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen Doc

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen Mobipocket

Set Theory (Studies in Logic: Mathematical Logic and Foundations) By Kenneth Kunen EPub