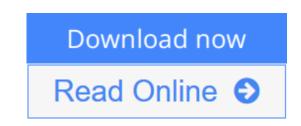


Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics)

By Robert Goldblatt



Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt

An introduction to nonstandard analysis based on a course given by the author. It is suitable for beginning graduates or upper undergraduates, or for self-study by anyone familiar with elementary real analysis. It presents nonstandard analysis not just as a theory about infinitely small and large numbers, but as a radically different way of viewing many standard mathematical concepts and constructions. It is a source of new ideas, objects and proofs, and a wealth of powerful new principles of reasoning. The book begins with the ultrapower construction of hyperreal number systems, and proceeds to develop one-variable calculus, analysis and topology from the nonstandard perspective. It then sets out the theory of enlargements of fragments of the mathematical universe, providing a foundation for the full-scale development of the nonstandard methodology. The final chapters apply this to a number of topics, including Loeb measure theory and its relation to Lebesgue measure on the real line. Highlights include an early introduction of the ideas of internal, external and hyperfinite sets, and a more axiomatic set-theoretic approach to enlargements than is usual.

<u>Download</u> Lectures on the Hyperreals: An Introduction to Non ...pdf

<u>Read Online Lectures on the Hyperreals: An Introduction to N ...pdf</u>

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics)

By Robert Goldblatt

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt

An introduction to nonstandard analysis based on a course given by the author. It is suitable for beginning graduates or upper undergraduates, or for self-study by anyone familiar with elementary real analysis. It presents nonstandard analysis not just as a theory about infinitely small and large numbers, but as a radically different way of viewing many standard mathematical concepts and constructions. It is a source of new ideas, objects and proofs, and a wealth of powerful new principles of reasoning. The book begins with the ultrapower construction of hyperreal number systems, and proceeds to develop one-variable calculus, analysis and topology from the nonstandard perspective. It then sets out the theory of enlargements of fragments of the mathematical universe, providing a foundation for the full-scale development of the nonstandard methodology. The final chapters apply this to a number of topics, including Loeb measure theory and its relation to Lebesgue measure on the real line. Highlights include an early introduction of the ideas of internal, external and hyperfinite sets, and a more axiomatic set-theoretic approach to enlargements than is usual.

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt Bibliography

- Rank: #2054240 in Books
- Brand: Brand: Springer
- Published on: 1998-10-01
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .81" w x 6.14" l, 1.28 pounds
- Binding: Hardcover
- 293 pages

Download Lectures on the Hyperreals: An Introduction to Non ...pdf

Read Online Lectures on the Hyperreals: An Introduction to N ... pdf

Editorial Review

Review

R. Goldblatt

Lectures on the Hyperreals

An Introduction to Nonstandard Analysis

"Suitable for a graduate course . . . could be covered in an advanced undergraduate course . . . The author's ideas on how to achieve both intelligibility and rigor . . . will be useful reading for anyone intending to teach nonstandard analysis."?AMERICAN MATHEMATICAL SOCIETY

Users Review

From reader reviews:

Betty Hood:

Do you have favorite book? When you have, what is your favorite's book? Reserve is very important thing for us to know everything in the world. Each guide has different aim or perhaps goal; it means that reserve has different type. Some people truly feel enjoy to spend their the perfect time to read a book. They are really reading whatever they acquire because their hobby is usually reading a book. How about the person who don't like examining a book? Sometime, man feel need book whenever they found difficult problem as well as exercise. Well, probably you'll have this Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics).

Juan Farley:

Book is to be different per grade. Book for children until finally adult are different content. As you may know that book is very important normally. The book Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) was making you to know about other information and of course you can take more information. It is very advantages for you. The reserve Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) is not only giving you considerably more new information but also to be your friend when you truly feel bored. You can spend your personal spend time to read your e-book. Try to make relationship using the book Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics). You never sense lose out for everything when you read some books.

Richard McCormick:

Now a day people who Living in the era everywhere everything reachable by match the internet and the

resources in it can be true or not call for people to be aware of each facts they get. How individuals to be smart in getting any information nowadays? Of course the solution is reading a book. Studying a book can help persons out of this uncertainty Information specially this Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) book as this book offers you rich facts and knowledge. Of course the info in this book hundred percent guarantees there is no doubt in it as you know.

Darlene Gutierrez:

This Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) usually are reliable for you who want to certainly be a successful person, why. The reason why of this Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) can be one of several great books you must have is actually giving you more than just simple examining food but feed an individual with information that might be will shock your before knowledge. This book will be handy, you can bring it almost everywhere and whenever your conditions both in e-book and printed kinds. Beside that this Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) giving you an enormous of experience such as rich vocabulary, giving you test of critical thinking that we know it useful in your day exercise. So , let's have it and revel in reading.

Download and Read Online Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt #JEDVQKP5LO8

Read Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt for online ebook

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt 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 Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt books to read online.

Online Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt ebook PDF download

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt Doc

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt Mobipocket

Lectures on the Hyperreals: An Introduction to Nonstandard Analysis (Graduate Texts in Mathematics) By Robert Goldblatt EPub