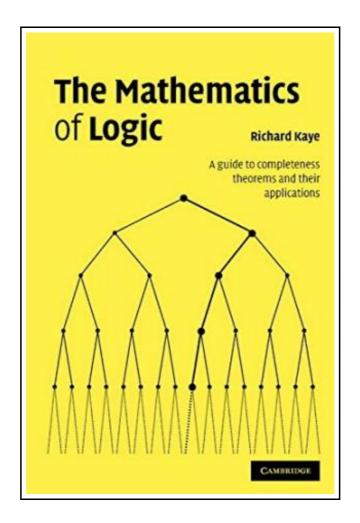
## The Mathematics of Logic: A Guide to Completeness Theorems and Their Applications



Filesize: 7.92 MB

### Reviews

This composed book is excellent. This really is for all who statte that there had not been a worth reading through. Your life period will probably be change as soon as you total looking over this ebook.

(Cheyanne Barrows)

# THE MATHEMATICS OF LOGIC: A GUIDE TO COMPLETENESS THEOREMS AND THEIR APPLICATIONS



Cambridge University Press, New Delhi, India, 2007. Paperback. Book Condition: New. First Edition. This undergraduate textbook covers the key material for a typical first course in logic, in particular presenting a full mathematical account of the most important result in logic, the Completeness Theorem for first-order logic. Looking at a series of interesting systems, increasing in complexity, then proving and discussing the Completeness Theorem for each, the author ensures that the number of new concepts to be absorbed at each stage is manageable, whilst providing lively mathematical applications throughout. Unfamiliar terminology is kept to a minimum, no background in formal set-theory is required, and the book contains proofs of all the required set theoretical results. The reader is taken on a journey starting with König's Lemma, and progressing via order relations, Zorn's Lemma, Boolean algebras, and propositional logic, to completeness and compactness of first-order logic. As applications of the work on first-order logic, two final chapters provide introductions to model theory and nonstandard analysis. Lively mathematical examples and some unusual formal systems stimulate the reader from the very beginning Suitable as an introduction to logic for students without any background in formal set theory Supported by companion web-pages containing further material and exercises Contents Preface; How to read this book; 1. Königs lemma; 2. Posets and maximal elements; 3. Formal systems; 4. Deductions in posets; 5. Boolean algebras; 6. Propositional logic; 7. Valuations; 8. Filters and ideals; 9. First-order logic; 10. Completeness and compactness; 11. Model theory; 12. Nonstandard analysis; Bibliography; Index. Printed Pages: 216 with 4 line diagrams, 141 exercises, and 50 worked examples. Size: 150 x 230 Mm.

Read The Mathematics of Logic: A Guide to Completeness Theorems and Their Applications Online

Download PDF The Mathematics of Logic: A Guide to Completeness Theorems and Their Applications

#### Other eBooks



#### DK Readers Day at Greenhill Farm Level 1 Beginning to Read

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in.This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs...

Save Document »



#### The Voyagers Series - Europe: A New Multi-Media Adventure Book 1

Strength Through Communications, United States, 2011. Paperback. Book Condition: New. 229 x 152 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The Voyagers Series is a new multi-media, multi-disciplinary approach to teaching...

Save Document »



Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)

Createspace, United States, 2015. Paperback. Book Condition: New. Apoorva Dingar (illustrator). Large Print. 214 x 149 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*\*. Klara is a little different from the other...

Save Document »



Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities

HarperCollins Publishers Inc, United States, 2016. Paperback. Book Condition: New. Reprint. 203  $\times$  135 mm. Language: English . Brand New Book. An international bestseller, Barbara Coloroso s groundbreaking and trusted guide on bullying-including cyberbullying-arms parents...

Save Document »



#### The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

WW Norton Co, United States, 2016. Hardback. Book Condition: New. 4th Revised edition. 244 x 165 mm. Language: English . Brand New Book. The Well-Trained Mind will instruct you, step by step, on how to...

Save Document »