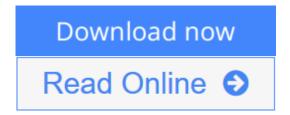


A First Course in Discrete Mathematics

By John C. Molluzzo, Fred Buckley



A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley

This highly regarded work fills the need for a treatment of elementary discrete mathematics that provides a core of mathematical terminology and concepts as well as emphasizes computer applications. Includes numerous elementary applications to computing and examples with solutions.

Title of related interest by Waveland Press: Buckley-Lewinter, *Introductory Graph Theory with Applications* (ISBN 9781478611752).

1. Number Systems

The Binary System / The Octal and Haxadecimal Systems / The Integers / The Real Numbers / Case Study: Computer Arithmetic: Binary Numbers / Case Study: Computer Arithmetic: Floating-Point Numbers / Case Study: Computer Arithmetic: Floating-Point Arithmetic / Case Study: Memory Addressing and Data Encoding

2. Sets and Logic

Sets and Elements / Subsets / Venn Diagrams / Intersections, Unions, and Complements / Conjunction, Disjunction, and Negation / Conditional and Biconditional Statements / Tautologies and Contradictions / Logical Implication and Decision Tables / Case Study: Searching and Sorting

3. Combinatorics

Mathematical Induction / Permutations / Combinations / Binomial Coefficients / Distributions / Case Study: Correctness of Algorithms / Case Study: Introduction to Algorithm Analysis

4. Probability

Finite Probability / Conditional Probability and Independence / Compound Experiments and Repeated Trials / Random Variables and Expected Value / Case Study: Random Numbers and Simulation

5. Relations and Functions

Relations / Functions / Graphs of Functions / Three Classes of Functions /

Operations on Functions: Inverses / Case Study: Computer Functions / Case Study: Algorithm Analysis: Orders of Magnitude / Case Study: Cryptography

6. Vectors and Matrices

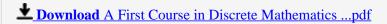
Matrices and Arrays / Matrix Multiplication / The Inverse of a Matrix and Determinants / Case Study: Stacks, Queues, and Deques / Case Study: Implementation and Comparison of Sorting Algorithms

7. Boolean Algebra

Boolean Algebras and Their Properties / Boolean Functions / Karnaugh Maps and Prime Implicants / Minimizing Boolean Functions and Expressions / Case Study: Switching Theory

8. Graph Theory

Graphs and Digraphs / Basic Definitions / Classes of Graphs / Matrices Associated with Graphs / Connectivity / Traversing Graphs / Case Study: Heap Sort / Case Study: The Critical Path Method



Read Online A First Course in Discrete Mathematics ...pdf

A First Course in Discrete Mathematics

By John C. Molluzzo, Fred Buckley

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley

This highly regarded work fills the need for a treatment of elementary discrete mathematics that provides a core of mathematical terminology and concepts as well as emphasizes computer applications. Includes numerous elementary applications to computing and examples with solutions.

Title of related interest by Waveland Press: Buckley-Lewinter, *Introductory Graph Theory with Applications* (ISBN 9781478611752).

1. Number Systems

The Binary System / The Octal and Haxadecimal Systems / The Integers / The Real Numbers / Case Study: Computer Arithmetic: Binary Numbers / Case Study: Computer Arithmetic: Floating-Point Numbers / Case Study: Computer Arithmetic: Floating-Point Arithmetic / Case Study: Memory Addressing and Data Encoding

2. Sets and Logic

Sets and Elements / Subsets / Venn Diagrams / Intersections, Unions, and Complements / Conjunction, Disjunction, and Negation / Conditional and Biconditional Statements / Tautologies and Contradictions / Logical Implication and Decision Tables / Case Study: Searching and Sorting

3. Combinatorics

Mathematical Induction / Permutations / Combinations / Binomial Coefficients / Distributions / Case Study: Correctness of Algorithms / Case Study: Introduction to Algorithm Analysis

4. Probability

Finite Probability / Conditional Probability and Independence / Compound Experiments and Repeated Trials / Random Variables and Expected Value / Case Study: Random Numbers and Simulation

5. Relations and Functions

Relations / Functions / Graphs of Functions / Three Classes of Functions / Operations on Functions: Inverses / Case Study: Computer Functions / Case Study: Algorithm Analysis: Orders of Magnitude / Case Study: Cryptography

6. Vectors and Matrices

Matrices and Arrays / Matrix Multiplication / The Inverse of a Matrix and Determinants / Case Study: Stacks, Queues, and Deques / Case Study: Implementation and Comparison of Sorting Algorithms

7. Boolean Algebra

Boolean Algebras and Their Properties / Boolean Functions / Karnaugh Maps and Prime Implicants /

Minimizing Boolean Functions and Expressions / Case Study: Switching Theory

8. Graph Theory

Graphs and Digraphs / Basic Definitions / Classes of Graphs / Matrices Associated with Graphs / Connectivity / Traversing Graphs / Case Study: Heap Sort / Case Study: The Critical Path Method

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley Bibliography

Sales Rank: #714142 in Books
Brand: Brand: Waveland Pr Inc
Published on: 1997-01-01
Original language: English

• Number of items: 1

• Dimensions: 9.75" h x 7.50" w x 1.25" l, 2.15 pounds

• Binding: Hardcover

• 507 pages

▲ Download A First Course in Discrete Mathematics ...pdf

Read Online A First Course in Discrete Mathematics ...pdf

Download and Read Free Online A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley

Editorial Review

Users Review

From reader reviews:

Timothy Brown:

The book A First Course in Discrete Mathematics can give more knowledge and information about everything you want. So why must we leave the best thing like a book A First Course in Discrete Mathematics? Several of you have a different opinion about reserve. But one aim this book can give many data for us. It is absolutely right. Right now, try to closer using your book. Knowledge or info that you take for that, you could give for each other; you could share all of these. Book A First Course in Discrete Mathematics has simple shape but the truth is know: it has great and massive function for you. You can seem the enormous world by available and read a guide. So it is very wonderful.

Patricia Frazier:

What do you with regards to book? It is not important together with you? Or just adding material when you require something to explain what the ones you have problem? How about your free time? Or are you busy man or woman? If you don't have spare time to perform others business, it is gives you the sense of being bored faster. And you have extra time? What did you do? Everyone has many questions above. They need to answer that question mainly because just their can do which. It said that about reserve. Book is familiar on every person. Yes, it is appropriate. Because start from on kindergarten until university need this A First Course in Discrete Mathematics to read.

Dale Randolph:

Reading a reserve can be one of a lot of action that everyone in the world adores. Do you like reading book consequently. There are a lot of reasons why people enjoy it. First reading a book will give you a lot of new information. When you read a e-book you will get new information since book is one of numerous ways to share the information as well as their idea. Second, studying a book will make you more imaginative. When you looking at a book especially fictional book the author will bring one to imagine the story how the characters do it anything. Third, you can share your knowledge to others. When you read this A First Course in Discrete Mathematics, you may tells your family, friends and soon about yours publication. Your knowledge can inspire others, make them reading a reserve.

Mathew Holstein:

As we know that book is vital thing to add our information for everything. By a e-book we can know everything we would like. A book is a set of written, printed, illustrated or blank sheet. Every year has been

exactly added. This guide A First Course in Discrete Mathematics was filled in relation to science. Spend your free time to add your knowledge about your science competence. Some people has various feel when they reading a new book. If you know how big benefit from a book, you can experience enjoy to read a reserve. In the modern era like at this point, many ways to get book that you simply wanted.

Download and Read Online A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley #M3YAGWZIQ16

Read A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley for online ebook

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley 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 A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley books to read online.

Online A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley ebook PDF download

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley Doc

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley Mobipocket

A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley EPub

M3YAGWZIQ16: A First Course in Discrete Mathematics By John C. Molluzzo, Fred Buckley