

Mathematical Ideas Custom Edition

Cultural Development of Mathematical Ideas
Math Course
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Hands-On Mathematics for Deep Learning
Teaching Mathematics in Grades 6 - 12
Mathematics for Economics
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Cultural Development of Mathematical Ideas

Math Course

This is a concise and informal introductory book on the mathematical concepts that underpin computer graphics. The author, John Vince, makes the concepts easy to understand, enabling non-experts to come to terms with computer animation work. The book complements the author's other works and is written in the same accessible and easy-to-read style. It is also a useful reference book for programmers working in the field of computer graphics, virtual reality, computer animation, as well as students on digital media courses, and even mathematics courses.

Early Childhood Math Routines

This activities manual includes activities designed to be done in class or outside of class. These activities promote critical thinking and discussion and give students a depth of understanding and perspective on the concepts presented in the text.

Hands-On Mathematics for Deep Learning

This new text provides a contemporary approach to college algebra, ideal for the many skeptical or apprehensive students who ask, When am I ever going to use this? The key phrase is Make It Real since the goal is to make the material relevant and understandable to today's college students. But many books make this claim--so how is PRECALCULUS: A MAKE IT REAL APPROACH different? In other

texts, which simply wrap real-world situations around problems, the context isn't needed to do the mathematics. Written by skilled and passionate teachers, this text uses real-world data sets and situations to draw out mathematical concepts. Students are immersed in familiar contexts--from golf course ratings to Egyptian pyramids--from which concepts emerge naturally, and then guided in using their understanding of those ideas to make sense of the mathematics. The real-world contexts are not only helpful for understanding procedures--they're necessary. The concept of a function, the use of modeling, and the thorough integration of real-world applications are integral to the text. If there's one new precalculus text crafted to stand up to a reality check comparison with your current book, this is it. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Teaching Mathematics in Grades 6 - 12

A comprehensive guide to getting well-versed with the mathematical techniques for building modern deep learning architectures

Key Features

- Understand linear algebra, calculus, gradient algorithms, and other concepts essential for training deep neural networks
- Learn the mathematical concepts needed to understand how deep learning models function
- Use deep learning for solving problems related to vision, image, text, and sequence applications

Book Description

Most programmers and data scientists struggle with mathematics, having either overlooked or forgotten core mathematical concepts. This book uses Python libraries to help you understand the math required to build deep learning (DL) models. You'll begin by learning about core mathematical and modern computational techniques used to design and implement DL algorithms. This book will cover essential topics, such as linear algebra, eigenvalues and eigenvectors, the singular value decomposition concept, and gradient algorithms, to help you understand how to train deep neural networks. Later chapters focus on important neural networks, such as the linear neural network and multilayer perceptrons, with a primary focus on helping you learn how each model works. As you advance, you will delve into the math used for regularization, multi-layered DL, forward propagation, optimization, and backpropagation techniques to understand what it takes to build full-fledged DL models. Finally, you'll explore CNN, recurrent neural network (RNN), and GAN models and their application. By the end of this book, you'll have built a strong foundation in neural networks and DL mathematical concepts, which will help you to confidently research and build custom models in DL. What you will learn

- Understand the key mathematical concepts for building neural network models
- Discover core multivariable calculus concepts
- Improve the performance of deep learning models using optimization techniques
- Cover optimization algorithms, from basic stochastic gradient descent (SGD) to the advanced Adam optimizer
- Understand computational graphs and their importance in DL
- Explore the backpropagation algorithm to reduce output error
- Cover DL algorithms such as convolutional neural networks (CNNs), sequence models, and generative adversarial networks (GANs)

Who this book is for

This book is for data scientists, machine learning developers, aspiring deep learning developers, or anyone who wants to understand the foundation of deep learning by learning the math behind it. Working knowledge of the Python programming language and machine learning basics is required.

Mathematics for Economics

"An introduction to some of the mathematical ideas which are useful to biologists, the ways in which biological problems can be expressed mathematically, and how the mathematical equations which arise in biological work can be solved This book is particularly concerned with non-statistical topics"--From publisher description.

More Precisely: The Math You Need to Do Philosophy - Second Edition

If you've ever taken a graduate statistics course and discovered that you've forgotten how to divide a fraction or turn a fraction into a percentage, then this handy guide to mathematics is for you. Each topic is provided with a definition, explanation, and examples of how to solve a particular problem using the topic's technique. With ample cross-referencing, this guide is the perfect reference for researchers working with numbers, who need a review of mathematical concepts.

Exam Prep for: Mathematical Ideas with Appendices --

From one of the greatest minds in contemporary mathematics, Professor E.T. Bell, comes a witty, accessible, and fascinating look at the beautiful craft and enthralling history of mathematics. *Men of Mathematics* provides a rich account of major mathematical milestones, from the geometry of the Greeks through Newton's calculus, and on to the laws of probability, symbolic logic, and the fourth dimension. Bell breaks down this majestic history of ideas into a series of engrossing biographies of the great mathematicians who made progress possible—and who also led intriguing, complicated, and often surprisingly entertaining lives. Never pedantic or dense, Bell writes with clarity and simplicity to distill great mathematical concepts into their most understandable forms for the curious everyday reader. Anyone with an interest in math may learn from these rich lessons, an advanced degree or extensive research is never necessary.

MATH IN SOCIETY

This book is a unique teaching tool that takes math lovers on a journey designed to motivate kids (and kids at heart) to learn the fun of factoring and prime numbers. This volume visually explores the concepts of factoring and the role of prime and composite numbers. The playful and colorful monsters are designed to give children (and even older audiences) an intuitive understanding of the building blocks of numbers and the basics of multiplication. The introduction and appendices can also help adult readers answer questions about factoring from their young audience. The artwork is crisp and creative and the colors are bright and engaging, making this volume a welcome deviation from standard math texts. Any person, regardless of age, can profit from reading this book. Readers will find themselves returning to its pages for a very long time, continually learning from and getting to know the monsters as their knowledge expands. *You Can Count on Monsters* is a magnificent addition for any math education program and is enthusiastically recommended to every teacher, parent and grandparent, student, child, or other individual interested in exploring the visually fascinating world of the

numbers 1 through 100.

Mathematical Ideas Custom Edition for Borough of Manhattan Community College

This text offers guidance to teachers, mathematics coaches, administrators, parents, and policymakers. This book: provides a research-based description of eight essential mathematics teaching practices ; describes the conditions, structures, and policies that must support the teaching practices ; builds on NCTM's Principles and Standards for School Mathematics and supports implementation of the Common Core State Standards for Mathematics to attain much higher levels of mathematics achievement for all students ; identifies obstacles, unproductive and productive beliefs, and key actions that must be understood, acknowledged, and addressed by all stakeholders ; encourages teachers of mathematics to engage students in mathematical thinking, reasoning, and sense making to significantly strengthen teaching and learning.

Beginning Algebra: Connecting Concepts Through Applications

"This book begins by pushing back on the kind of rote routines that lack opportunities for reasoning (like the calendar) that teachers often use in early childhood and primary classrooms. Instead, the author offers innovations on old routines and some new routines that encourage reasoning, argumentation, and the development of important math ideas. She focuses on using math routines in playful ways with your children. See chapter titles for the different routines featured in the book"--

Men of Mathematics

This text offers a presentation of the mathematics required to tackle problems in economic analysis. After a review of the fundamentals of sets, numbers, and functions, it covers limits and continuity, the calculus of functions of one variable, linear algebra, multivariate calculus, and dynamics.

The Foundations of Mathematics

More Precisely is a rigorous and engaging introduction to the mathematics necessary to do philosophy. Eric Steinhart provides lucid explanations of many basic mathematical concepts and sets out the most commonly used notational conventions. He also demonstrates how mathematics applies to fundamental issues in various branches of philosophy, including metaphysics, philosophy of language, epistemology, and ethics. This second edition adds a substantial section on decision and game theory, as well as a chapter on information theory and the efficient coding of information.

Principles to Actions

When the teacher tells her class that they can think of almost everything as a math problem, one student acquires a math anxiety which becomes a real curse.

Basic College Mathematics Through Applications

Talking about numbers - Connecting numbers, stories and facts - Numbers and operations - Collecting, representing and interpreting data - Investigating geometry with pictures and words - Sights and sounds of measurement - Seeing patterns and sharing algebraic ideas - Seeing and hearingng_____

You Can Count on Monsters: The First 100 Numbers and Their Characters

Drawing upon field studies conducted in 1978, 1980 and 2001 with the Oksapmin, a remote Papua New Guinea group, Geoffrey B. Saxe traces the emergence of new forms of numerical representations and ideas in the social history of the community. In traditional life, the Oksapmin used a counting system that makes use of twenty-seven parts of the body; there is no evidence that the group used arithmetic in prehistory. As practices of economic exchange and schooling have shifted, children and adults unwittingly reproduced and altered the system in order to solve new kinds of numerical and arithmetical problems, a process that has led to new forms of collective representations in the community. While Dr Saxe's focus is on the Oksapmin, the insights and general framework he provides are useful for understanding shifting representational forms and emerging cognitive functions in any human community.

Burn Math Class

Strengthen mathematics lessons through collaborative learning with this research-based professional development program. Included are grade-appropriate number and operations topics aligned with the Common Core State Standards.

Mathematical Ideas in Biology

Teaching Mathematics in Grades 6 - 12 by Randall E. Groth explores how research in mathematics education can inform teaching practice in grades 6-12. The author shows preservice mathematics teachers the value of being a "researcher—constantly experimenting with methods for developing students' mathematical thinking—and connecting this research to practices that enhance students' understanding of the material. Ultimately, preservice teachers will gain a deeper understanding of the types of mathematical knowledge students bring to school, and how students' thinking may develop in response to different teaching strategies.

Math Dictionary With Solutions

Student's Study Guide and Solutions Manual for Mathematical Ideas

The tenth edition of Mathematical Ideas is the best ever! We have continued with the features and pedagogy that has made this book so successful over the years

and at the same time, we've spent a considerable amount of time to incorporate fresh data, new photos, and new content (by way of a new chapter on trigonometry). We have tried to reflect the needs of our users - both long-time readers and those new to the Math Ideas way of teaching liberal arts math. We hope you'll be pleased with the results.

- Chapter Openers Each chapter opens with an application related to the chapter topic. These help students see the relevance of mathematics they are about to learn.
- Varied Exercise Sets We continue to present a variety of exercises including drill, conceptual, and applied problems. We continue to use graphs, tables, and charts when appropriate. Most sections include a few challenging exercises that require students to extend the ideas presented in the section. To address the issue of writing across the curriculum, most exercise sets include some exercises that require the student to answer by writing a few sentences.
- For Further Thought These entries encourage students to discuss a

Discovering Discrete Dynamical Systems

To many outsiders, mathematicians appear to think like computers, grimly grinding away with a strict formal logic and moving methodically--even algorithmically--from one black-and-white deduction to another. Yet mathematicians often describe their most important breakthroughs as creative, intuitive responses to ambiguity, contradiction, and paradox. A unique examination of this less-familiar aspect of mathematics, *How Mathematicians Think* reveals that mathematics is a profoundly creative activity and not just a body of formalized rules and results. Nonlogical qualities, William Byers shows, play an essential role in mathematics. Ambiguities, contradictions, and paradoxes can arise when ideas developed in different contexts come into contact. Uncertainties and conflicts do not impede but rather spur the development of mathematics. Creativity often means bringing apparently incompatible perspectives together as complementary aspects of a new, more subtle theory. The secret of mathematics is not to be found only in its logical structure. The creative dimensions of mathematical work have great implications for our notions of mathematical and scientific truth, and *How Mathematicians Think* provides a novel approach to many fundamental questions. Is mathematics objectively true? Is it discovered or invented? And is there such a thing as a "final" scientific theory? Ultimately, *How Mathematicians Think* shows that the nature of mathematical thinking can teach us a great deal about the human condition itself.

Brain-Compatible Activities for Mathematics, Grades 2-3

This manual provides solutions to odd-numbered exercises in the exercise sets, the Extensions, and the Appendix exercises, as well as solutions for all the Chapter Test exercises. Chapter summaries review key points in the text, providing extra examples, and enumerate major topic objectives.

How Mathematicians Think

Mathematics and Its History

More Precisely provides a rigorous and engaging introduction to the mathematics necessary to do philosophy. It is impossible to fully understand much of the most important work in contemporary philosophy without a basic grasp of set theory, functions, probability, modality and infinity. Until now, this knowledge was difficult to acquire. Professors had to provide custom handouts to their classes, while students struggled through math texts searching for insight. More Precisely fills this key gap. Eric Steinhart provides lucid explanations of the basic mathematical concepts and sets out most commonly used notational conventions. Furthermore, he demonstrates how mathematics applies to many fundamental issues in branches of philosophy such as metaphysics, philosophy of language, epistemology, and ethics.

Math for Programmers

Rev. ed. of: Mathematics in our world / Allan G. Bluman. c2005.

Show and Tell

For courses covering general topics in math course, often called liberal arts math, contemporary math, or survey of math. Everyday math, everyday language. The Tenth Edition of A Survey of Mathematics with Applications continues the tradition of showing students how we use mathematics in our daily lives and why it's important, in a clear and accessible way. With straightforward language, detailed examples, and interesting applications, the authors ensure non-majors will relate to the math and understand the mathematical concepts that pervade their lives. With this revision, an expanded media program in MyMathLab, and a new workbook further build upon the tradition of motivating and supporting student learning. Also available with MyMathLab MyMathLab is an online homework, tutorial, and assessment program designed to work with this text to engage students and improve results. Within its structured environment, students practice what they learn, test their understanding, and engage with media resources to help them absorb course material and understand difficult concepts. NEW! This edition's MyMathLab course provides additional tools to help with understanding and preparedness. Note: You are purchasing a standalone product; MyLab™ & Mastering™ does not come packaged with this content. Students, if interested in purchasing this title with MyLab & Mastering, ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the physical text and MyLab & Mastering, search for: 0134115767 / 9780134115764 * A Survey of Mathematics with Applications plus MyMathLab Student Access Card -- Access Code Card Package Package consists of: 0134112105 / 9780134112107 * A Survey of Mathematics with Applications 0321431308 / 9780321431301 * MyMathLab -- Glue-in Access Card 0321654064 / 9780321654069 * MyMathLab Inside Star Sticker

More Precisely

Discovering Discrete Dynamical Systems is a mathematics textbook designed for use in a student-led, inquiry-based course for advanced mathematics majors. Fourteen modules each with an opening exploration, a short exposition and related

exercises, and a concluding project guide students to self-discovery on topics such as fixed points and their classifications, chaos and fractals, Julia and Mandelbrot sets in the complex plane, and symbolic dynamics. Topics have been carefully chosen as a means for developing student persistence and skill in exploration, conjecture, and generalization while at the same time providing a coherent introduction to the fundamentals of discrete dynamical systems. This book is written for undergraduate students with the prerequisites for a first analysis course, and it can easily be used by any faculty member in a mathematics department, regardless of area of expertise. Each module starts with an exploration in which the students are asked an open-ended question. This allows the students to make discoveries which lead them to formulate the questions that will be addressed in the exposition and exercises of the module. The exposition is brief and has been written with the intent that a student who has taken, or is ready to take, a course in analysis can read the material independently. The exposition concludes with exercises which have been designed to both illustrate and explore in more depth the ideas covered in the exposition. Each module concludes with a project in which students bring the ideas from the module to bear on a more challenging or in-depth problem. A section entitled "To the Instructor" includes suggestions on how to structure a course in order to realize the inquiry-based intent of the book. The book has also been used successfully as the basis for an independent study course and as a supplementary text for an analysis course with traditional content.

Mathematics for Elementary Teachers

MATHEMATICAL EXCURSIONS, Third Edition, teaches students that mathematics is a system of knowing and understanding our surroundings. For example, sending information across the Internet is better understood when one understands prime numbers; the perils of radioactive waste take on new meaning when one understands exponential functions; and the efficiency of the flow of traffic through an intersection is more interesting after seeing the system of traffic lights represented in a mathematical form. Students will learn those facets of mathematics that strengthen their quantitative understanding and expand the way they know, perceive, and comprehend their world. We hope you enjoy the journey. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Thinking Mathematically

BEGINNING ALGEBRA: CONNECTING CONCEPTS THROUGH APPLICATIONS shows students how to apply traditional mathematical skills in real-world contexts. The emphasis on skill building and applications engages students as they master algebraic concepts, problem solving, and communication skills. Students learn how to solve problems generated from realistic applications, instead of learning techniques without conceptual understanding. The authors have developed several key ideas to make concepts real and vivid for students. First, they emphasize strong algebra skills. These skills support the applications and enhance student comprehension. Second, the authors integrate applications, drawing on realistic data to show students why they need to know and how to apply math. The applications help students develop the skills needed to explain the meaning of

answers in the context of the application. Third, the authors develop key concepts as students progress through the course. For example, the distributive property is introduced in real numbers, covered when students are learning how to multiply a polynomial by a constant, and finally when students learn how to multiply a polynomial by a monomial. These concepts are reinforced through applications in the text. Last, the authors' approach prepares students for intermediate algebra by including an introduction to material such as functions and interval notation as well as the last chapter that covers linear and quadratic modeling. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Mathematical Excursions

Mathematical Ideas

A bridge to the world of mathematics for readers who want to gain a good foundation in basic mathematical skills for research and other activities. This book aims to help students of social sciences, liberal arts, and humanities to develop the ability to analyze and reason mathematically, to model situations and problems, and to be able to infer, present, and communicate their analysis effectively. Mathematical concepts are presented in both historical and everyday contexts to ease their utilization in the real world. Readers are introduced to the skills of expressing mathematical ideas using the language of sets, logically analyzing arguments and their validity, processing and interpreting data, and using probability to handle the inherent randomness of our world. Chapters dedicated to symmetry, perspective, and art will enable readers to reason, model, and evaluate everyday situations. The book will also increase awareness of how mathematical patterns pervade the world around us. Key Features · Gentle and non-calculus-based treatment of the topics · Real-life examples and data along with numerous visual aids · Plethora of solved examples and exercises to develop hands-on experience · Material on computational tools for data handling, analyses, and presentation

Precalculus: A Make it Real Approach

In *Math for Programmers* you'll explore important mathematical concepts through hands-on coding. Filled with graphics and more than 300 exercises and mini-projects, this book unlocks the door to interesting—and lucrative!—careers in some of today's hottest fields. As you tackle the basics of linear algebra, calculus, and machine learning, you'll master the key Python libraries used to turn them into real-world software applications. Summary To score a job in data science, machine learning, computer graphics, and cryptography, you need to bring strong math skills to the party. *Math for Programmers* teaches the math you need for these hot careers, concentrating on what you need to know as a developer. Filled with lots of helpful graphics and more than 200 exercises and mini-projects, this book unlocks the door to interesting—and lucrative!—careers in some of today's hottest programming fields. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Skip

the mathematical jargon: This one-of-a-kind book uses Python to teach the math you need to build games, simulations, 3D graphics, and machine learning algorithms. Discover how algebra and calculus come alive when you see them in code! About the book In Math for Programmers you'll explore important mathematical concepts through hands-on coding. Filled with graphics and more than 300 exercises and mini-projects, this book unlocks the door to interesting—and lucrative!—careers in some of today's hottest fields. As you tackle the basics of linear algebra, calculus, and machine learning, you'll master the key Python libraries used to turn them into real-world software applications. What's inside

- Vector geometry for computer graphics
- Matrices and linear transformations
- Core concepts from calculus
- Simulation and optimization
- Image and audio processing
- Machine learning algorithms for regression and classification

About the reader For programmers with basic skills in algebra. About the author Paul Orland is a programmer, software entrepreneur, and math enthusiast. He is co-founder of Tachyus, a start-up building predictive analytics software for the energy industry. You can find him online at www.paulor.land.

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A Survey of Mathematics with Applications

Teaching by Design in Elementary Mathematics, Grades 2-3

Demonstrating instructional principles discussed in David A. Sousa's *How the Brain Learns Mathematics*, this resource provides brain-friendly, ready-to-use mathematics lessons for Grades 2-3. Teachers will find step-by-step guidance and all the necessary reproducible materials for mathematics instruction that involves group work, reflection, movement, and visualization. Through activities such as Jumping Jelly Beans, Math Hockey, and Treasure Hunt, young learners will enjoy developing skills connected with number patterns and place value, multi-digit addition and subtraction, multiplication and division, fractions, measurement, geometry, and more. Aligned with NCTM standards and focal points, the instructional strategies:

- Enhance motivation and content retention
- Address individual intelligences
- Promote writing as an important learning tool
- Use concrete models to make concepts meaningful
- Connect mathematical ideas to the real world
- Teach creative problem solving
- Deepen and revitalize instruction using Sousa's proven brain-compatible approach for helping every student develop self-confidence in mathematics!

Finite Mathematics, Binder Ready Version

Finite Mathematics: An Applied Approach, 11th Edition once again lives up to its reputation as a clearly written, comprehensive finite mathematics book. This Edition builds upon a solid foundation by integrating new features and techniques that further enhance student interest and involvement. All existing problems have been updated to provide relevance and timeliness. Finite Mathematics contains the same elements such as Step-by-Step Examples, Exercise Sets, and Learning Objectives in every chapter. In an engaging and accessible style, this text demonstrates how mathematics applies to various fields of study. The text is packed with real data and real-life applications to business, economics, social and life sciences.

Mathematics for Computer Graphics

Forget everything you've been taught about math. In Burn Math Class, Jason Wilkes takes the traditional approach to mathematics education—with its unwelcoming textbooks, unexplained rules, and authoritarian assertions—and sets it on fire. Focusing on how mathematics is created rather than on mathematical facts, Wilkes teaches the subject in a way that requires no memorization and no prior knowledge beyond addition and multiplication. From these simple foundations, Burn Math Class shows how mathematics can be (re)invented from scratch without preexisting textbooks and courses. We can discover math on our own through experimentation and failure, without appealing to any outside authority. When math is created free from arcane notations and pretentious jargon that hide the simplicity of mathematical concepts, it can be understood organically—and it becomes fun! Following this unconventional approach, Burn Math Class leads the reader from the basics of elementary arithmetic to various “advanced” topics, such as time-dilation in special relativity, Taylor series, and calculus in infinite-dimensional spaces. Along the way, Wilkes argues that orthodox mathematics education has been teaching the subject backward: calculus belongs before many of its so-called prerequisites, and those prerequisites cannot be fully understood without calculus. Like the smartest, craziest teacher you've ever had, Wilkes guides you on an adventure in mathematical creation that will radically change the way you think about math. Revealing the beauty and simplicity of this timeless subject, Burn Math Class turns everything that seems difficult about mathematics upside down and sideways until you understand just how easy math can be.

Mathematical Ideas /.

"There are many textbooks available for a so-called transition course from calculus to abstract mathematics. I have taught this course several times and always find it problematic. The Foundations of Mathematics (Stewart and Tall) is a horse of a different color. The writing is excellent and there is actually some useful mathematics. I definitely like this book."--The Bulletin of Mathematics Books

A Bridge to Mathematics

Normal 0 false false false The Akst/Bragg series' success is built around clear and concise writing, a side-by-side "teach by example" approach, and integrated

applications throughout that help students achieve a conceptual understanding. The user-friendly design offers a distinctive side-by-side format that pairs examples and their solutions with corresponding practice exercises. Students understand from the very beginning that doing math is an essential part of learning it. Motivational, real-world applications demonstrate how integral mathematical understanding is to a variety of disciplines, careers, and everyday situations.

Math in Our World

This textbook provides a unified and concise exploration of undergraduate mathematics by approaching the subject through its history. Readers will discover the rich tapestry of ideas behind familiar topics from the undergraduate curriculum, such as calculus, algebra, topology, and more. Featuring historical episodes ranging from the Ancient Greeks to Fermat and Descartes, this volume offers a glimpse into the broader context in which these ideas developed, revealing unexpected connections that make this ideal for a senior capstone course. The presentation of previous versions has been refined by omitting the less mainstream topics and inserting new connecting material, allowing instructors to cover the book in a one-semester course. This condensed edition prioritizes succinctness and cohesiveness, and there is a greater emphasis on visual clarity, featuring full color images and high quality 3D models. As in previous editions, a wide array of mathematical topics are covered, from geometry to computation; however, biographical sketches have been omitted. Mathematics and Its History: A Concise Edition is an essential resource for courses or reading programs on the history of mathematics. Knowledge of basic calculus, algebra, geometry, topology, and set theory is assumed. From reviews of previous editions: "Mathematics and Its History is a joy to read. The writing is clear, concise and inviting. The style is very different from a traditional text. I found myself picking it up to read at the expense of my usual late evening thriller or detective novel. The author has done a wonderful job of tying together the dominant themes of undergraduate mathematics." Richard J. Wilders, MAA, on the Third Edition "The book is presented in a lively style without unnecessary detail. It is very stimulating and will be appreciated not only by students. Much attention is paid to problems and to the development of mathematics before the end of the nineteenth century. This book brings to the non-specialist interested in mathematics many interesting results. It can be recommended for seminars and will be enjoyed by the broad mathematical community." European Mathematical Society, on the Second Edition

Mathematical Ideas

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