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Sophie's World
Astronomical Formulae for Calculators
Textbook on Spherical Astronomy
Celestial Calculations
A History of Modern Trigonometry
A Mathematical Mystery
A History of Modern Trigonometry
How Not to be Wrong
A History of Mathematics
Spherical Trigonometry
Classic Puzzles, Paradoxes, and Problems : Number Theory, Algebra, Geometry, Probability, Topology, Game Theory, Infinity, and Other Topics of Recreational Mathematics

Nicomachean Ethics
Unlocking the Hidden Mathematics in Video Games
Life, Logarithms, and Legacy
Applying Mathematics to Astro Navigation
The Art of South and Southeast Asia
The Colossal Book of Mathematics
The Mathematics of the Heavens and the Earth
A Cultural History of the Infinite - New Edition
Invisible in the Storm
John Napier

RAMOS YAZMIN

Heavenly Mathematics
Cambridge University Press
An interdisciplinary history of trigonometry from the mid-sixteenth century to the early twentieth The Doctrine of Triangles offers an interdisciplinary history of trigonometry that spans four centuries, starting in 1550 and concluding in the 1900s. Glen Van Brummelen tells the story of trigonometry as it evolved from an instrument for understanding the heavens to a practical tool, used in fields such as surveying and navigation.

In Europe, China, and America, trigonometry aided and was itself transformed by concurrent mathematical revolutions, as well as the rise of science and technology. Following its uses in mid-sixteenth-century Europe as the "foot of the ladder to the stars" and the mathematical helpmate of astronomy, trigonometry became a ubiquitous tool for modeling various phenomena, including animal populations and sound waves. In the late sixteenth century, trigonometry increasingly entered the physical world through the practical disciplines, and its societal reach expanded with the invention of logarithms. Calculus shifted mathematical reasoning from geometric to algebraic patterns of thought, and trigonometry’s participation in this new mathematical analysis grew, encouraging such innovations as complex numbers and non-Euclidean geometry. Meanwhile in China, trigonometry was evolving rapidly too, sometimes merging with indigenous forms of knowledge, and with Western discoveries. In the nineteenth century, trigonometry became even more integral to science and industry as a fundamental part of the science and engineering toolbox, and a staple subject in high school classrooms. A masterful combination of scholarly rigor and compelling narrative, The Doctrine of Triangles brings trigonometry’s rich

historical past full circle into the modern era.

Math with Bad Drawings Metropolitan Museum of Art

As Lucy Muchelney watches her ex-lover's sham of a wedding, she wishes herself anywhere else. It isn't until she finds a letter from the Countess of Moth, looking for someone to translate a groundbreaking French astronomy text, that she knows where to go. Showing up at the Countess' London home, she hoped to find a challenge, not a woman who takes her breath away. Catherine St Day looks forward to a quiet widowhood once her late husband's scientific legacy is fulfilled. She expected to hand off the translation and wash her hands of the project—instead, she is intrigued by the young woman who turns up at her door, begging to be allowed to do the work, and she agrees to let Lucy stay. But as Catherine finds herself longing for Lucy, everything she believes about herself and her life is tested. While Lucy spends her days interpreting the complicated French text, she spends her nights falling in love with the alluring Catherine. But sabotage and old wounds threaten to sever the threads that bind them. Can Lucy and Catherine find the strength to stay together or are they doomed to be star-crossed lovers?

A Resource for Educators Cambridge University Press

Presents works of art selected from the South and Southeast Asian and

Islamic collection of The Metropolitan Museum of Art, lessons plans, and classroom activities.
Math on Trial Princeton University Press
Heavenly MathematicsThe Forgotten Art of Spherical TrigonometryPrinceton University Press
Harmonies of the World Paradise Cay Publications
The Mathematics of the Heavens and the Earth is the first major history in English of the origins and early development of trigonometry. Glen Van Brummelen identifies the earliest known trigonometric precursors in ancient Egypt, Babylon, and Greece, and he examines the revolutionary discoveries of Hipparchus, the Greek astronomer believed to have been the first to make systematic use of trigonometry in the second century BC while studying the motions of the stars. The book traces trigonometry's development into a full-fledged mathematical discipline in India and Islam; explores its applications to such areas as geography and seafaring navigation in the European Middle Ages and Renaissance; and shows how trigonometry retained its ancient roots at the same time that it became an important part of the foundation of modern mathematics. The Mathematics of the Heavens and the Earth looks at the controversies as well, including disputes over whether Hipparchus was indeed the father of trigonometry, whether Indian trigonometry is original or derived from the Greeks, and the extent to which Western

science is indebted to Islamic trigonometry and astronomy. The book also features extended excerpts of translations of original texts, and detailed yet accessible explanations of the mathematics in them. No other book on trigonometry offers the historical breadth, analytical depth, and coverage of non-Western mathematics that readers will find in The Mathematics of the Heavens and the Earth.

A Gentle Introduction to Computational Astronomy

Princeton University Press A fun and lively look at the mathematical ideas concealed in video games Did you know that every time you pick up the controller to your PlayStation or Xbox, you are entering a world steeped in mathematics? Matthew Lane reveals the hidden mathematics in many of today's most popular video games—and explains why mathematical learning doesn't just happen in the classroom. He discusses how gamers are engaging with the traveling salesman problem when they play Assassin's Creed, why it is mathematically impossible for Mario to jump through the Mushroom Kingdom in Super Mario Bros., how The Sims teaches us the mathematical costs of relationships, and more. Power-Up shows how the world of video games is an unexpectedly rich medium for learning about the mathematical ideas that touch our lives—including our virtual ones.

Time, Astronomy, and

Calendars in the Jewish Tradition W. W. Norton & Company
Now in its fourth edition, this highly regarded book is ideal for those who wish to solve a variety of practical and recreational problems in astronomy using a scientific calculator or spreadsheet. Updated and extended, this new edition shows you how to use spreadsheets to predict, with greater accuracy, solar and lunar eclipses, the positions of the planets, and the times of sunrise and sunset.

Suitable for worldwide use, this handbook covers orbits, transformations and general celestial phenomena, and is essential for anyone wanting to make astronomical calculations for themselves. With clear, easy-to-follow instructions for use with a pocket calculator, shown alongside worked examples, it can be enjoyed by anyone interested in astronomy, and will be a useful tool for software writers and students studying introductory astronomy.

High-precision spreadsheet methods for greater accuracy are available at www.cambridge.org/practicalastronomy.
A Student's Guide to the Mathematics of Astronomy Princeton University Press
Written in plain language, 'Astro Navigation Demystified' aims to make the art of astro navigation easy and enjoyable to learn.
The Doctrine of Triangles Farrar, Straus and Giroux
The celebrated mathematician and

philosopher Pythagoras left no writings. But what if he had and the manuscript had never been found? Where would it be located? Two mathematicians, one American, one British, set out, unbeknownst to each other, to find the missing manuscript.

The Forgotten Art of Spherical Trigonometry Springer Science & Business Media

The author presents a selection of pieces from his Scientific American "Mathematical Games" column, presenting puzzles and concepts that range from arithmetic and geometrical games to the meaning of M.C. Escher's artwork.

The Doctrine of Triangles OUP Oxford

The columnist for Slate's popular "Do the Math" celebrates the logical, illuminating nature of math in today's world, sharing in accessible language mathematical approaches that demystify complex and everyday problems.

Astro Navigation Demystified Princeton University Press

Reprint. Originally published as the author's thesis (Ph. D.): University of London, 1982.

Plane And Spherical Trigonometry Princeton University Press

One day Sophie comes home from school to find two questions in her mail: "Who are you?" and "Where does the world come from?" Before she knows it she is enrolled in a correspondence course with a mysterious philosopher. Thus begins Jostein Gaarder's unique novel, which is not only a mystery, but also a

complete and entertaining history of philosophy.

The Role of Mathematics in Understanding Weather BRILL

A hilarious reeducation in mathematics-full of joy, jokes, and stick figures-that sheds light on the countless practical and wonderful ways that math structures and shapes our world. In Math With Bad Drawings, Ben Orlin reveals to us what math actually is; its myriad uses, its strange symbols, and the wild leaps of logic and faith that define the usually impenetrable work of the mathematician. Truth and knowledge come in multiple forms: colorful drawings, encouraging jokes, and the stories and insights of an empathetic teacher who believes that math should belong to everyone. Orlin shows us how to think like a mathematician by teaching us a brand-new game of tic-tac-toe, how to understand an economic crises by rolling a pair of dice, and the mathematical headache that ensues when attempting to build a spherical Death Star. Every discussion in the book is illustrated with Orlin's trademark "bad drawings," which convey his message and insights with perfect pitch and clarity. With 24 chapters covering topics from the electoral college to human genetics to the reasons not to trust statistics, Math with Bad Drawings is a life-changing book for the math-estranged and math-enamored alike.

Spherical Geometry and Its Applications

Cambridge University Press
Eli Maor examines the role of infinity in mathematics and geometry and its cultural impact on the arts and sciences. He evokes the profound intellectual impact the infinite has exercised on the human mind, from the "horror infiniti" of the Greeks to the works of M.C. Escher; from the ornamental designs of the Moslems, to the sage Giordano Bruno, whose belief in an infinite universe led to his death at the hands of the Inquisition. But above all, the book describes the mathematician's fascination with infinity, a fascination mingled with puzzlement. "Maor explores the idea of infinity in mathematics and in art and argues that this is the point of contact between the two, best exemplified by the work of the Dutch artist M.C. Escher, six of whose works are shown here in beautiful color plates."--Los Angeles Times "[Eli Maor's] enthusiasm for the topic carries the reader through a rich panorama." Choice "Fascinating and enjoyable.... places the ideas of infinity in a cultural context and shows how they have been espoused and molded by mathematics."-Science.

To Infinity and Beyond

Phoemixx Classics Ebooks
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Trigonometry: A Very Short Introduction

Princeton University Press

This new revision of a standard work gives a general but comprehensive introduction to positional astronomy. Useful for researchers as well as undergraduates.

Wind Wizard

HarperCollins

Many of the earliest books, particularly those dating back to the 1900s and before, are now extremely scarce and increasingly expensive. Pomona Press are republishing these classic works in affordable, high quality, modern editions, using the original text and artwork.

Trigonometry: a Very Short Introduction

Princeton University Press

"Spherical trigonometry was at the heart of astronomy and ocean-going navigation for two millennia. The discipline

was a mainstay of mathematics education for centuries, and it was a standard subject in high schools until the 1950s. Today, however, it is rarely taught. Heavenly Mathematics traces the rich history of this forgotten art, revealing how the cultures of classical Greece, medieval Islam, and the modern West used spherical trigonometry to chart the heavens and the Earth."--Jacket.

Sophie's World CRC Press

Born of the desire to understand the workings of motions of the heavenly bodies, trigonometry gave the ancient Greeks the ability to predict their futures. Most of what we see of the subject in school comes from these heavenly origins; 15th century astronomer Regiomontanus called it "the foot of the ladder to the stars." In this Very Short Introduction Glen Van Brummelen shows how trigonometry connects mathematics to science, and has today become an indispensable tool in predicting cyclic patterns like animal populations and ocean tides. Its historical journey through major cultures such as medieval India and the Islamic World has taken it through disciplines such as geography and even religious practice. Trigonometry has also been a major player in the most startling mathematical developments of the modern world. Its interactions with the concept of infinity led to Taylor and Fourier series,

some of the most practical tools of modern science. The birth of complex numbers led to a shocking union of exponential and trigonometric functions, creating the most beautiful formulas and powerful modelling tools in science. Finally, as Van Brummelen shows, trigonometry allows us to explore the strange new worlds of non-Euclidean geometries, opening up bizarre possibilities for the shape of space itself. And indeed, one of those new geometries - spherical - takes us full circle back to ancient Greek astronomers and European navigators, who first used it to chart their ways across the heavens and the earth. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

Mushroom Foraging Guide
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