A "Short" List Recommended Mathematics Books

These books would be the minimal selections required for a school library, a math teacher, or for anyone interested in furthering his or her understanding of mathematics.

In the future, I hope to give a brief book review of each of these titles. I would highly recommend the books by **John Byl** and **Larry Zimmerman** for starters (they lay a Biblical Christian foundation for the understanding of mathematics). Also, **Katherine Loop** has done a good job applying Biblical Christian presuppositions in an easily understandable way (what she writes is great for parents who need to know, understand, and apply these principles). The rest of the titles are written by authors who embrace a wide variety of epistemological starting points. Hence, reinterpretation is required in your reading (an extra challenge). *If every Christian school teacher of mathematics would study just half of these books, it would revolutionize their teaching*.

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- <u>101 Great Ideas for Introducing Key Concepts in Mathematics: A Resource for Secondary</u> <u>Teachers</u> by Alfred S. Posamentier and Herbert A. Hauptman
- <u>A History of the Circle: Mathematical Reasoning and the Physical Universe</u>, by Ernest Zebrowski
- <u>A Measure of Everything: An Illustrated Guide to the Science of Measurement</u>, by Christopher Joseph (general editor)
- <u>A Tour of the Calculus</u>, by David Berlinski
- Advanced Euclidean Geometry, by Alfred S. Posamentier
- <u>An Imaginary Tale</u>, by Paul J. Nahin
- Arithmetic for Parents, by Ron Aharoni
- Beyond Numbers: A Practical Guide to Teaching Math Biblically, by Katherine Loop
- Calculus: A Liberal Art (2nd edition), by William McGowen Priestley
- <u>Calculus Gems: Brief Lives and Memorable Mathematics</u>, by George F. Simmons
- <u>Calculus Made Easy</u> (revised 1998 edition), by Silvanus P. Thompson and Martin Gardner
- <u>Culinary Math</u>, by Linda Blocker and Julia Hill
- Doing Simple Math in Your Head, by W. J. Howard
- <u>e: The Story of a Number</u>, by Eli Maor
- <u>Feynman's Lost Lecture: The Motion of Planets Around the Sun</u>, by David L. and Judith R. Goodstein
- From Zero to Infinity: What Makes Numbers Interesting, by Constance Reid

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- <u>Gamma: Exploring Euler's Constant</u>, by Julian Havil
- Geometry Civilized: History, Culture, and Technique, by J. L. Heilbron
- Go Figure! Using Math to Answer Everyday Imponderables, by Clint Brookhart
- Infinite Ascent: A Short History of Mathematics, by David Berlinski
- Journey through Genius: The Great Theorems of Mathematics, by William Dunham
- Math Wonders to Inspire Teachers and Students, by Alfred S. Posamentier
- Mathematical Sorcery: Revealing the Secrets of Numbers, by Calvin C. Clawson
- Mathematical Mysteries: The Beauty and Magic of Numbers, by Calvin C. Clawson
- Mathematics and the Physical World, by Morris Kline
- <u>Mathematicians are People, Too: Stories from the Lives of Great Mathematicians</u>, by Luetta and Wilbert Reimer (Wilbert Reimer was my high school mathematics teacher in the mid-1960s)
- <u>Mathematics in Western Culture</u>, by Morris Kline
- Newton's Gift: How Sir Isaac Newton Unlocked the System of the World, by David Berlinski
- <u>Number: The Language of Science</u>, by Tobias Dantzig
- Pi: A Biography of the World's Most Mysterious Number, by Alfred S. Posamentier
- Practical Conic Sections: The Geometric Properties of Ellipses, Parabolas, and Hyperbolas, by J. W. Downs
- <u>Precalculus Mathematics in a Nutshell: Geometry, Algebra, Trigonometry</u>, by George F. Simmons
- <u>Preparing for General Physics: Math Skill Drills and Other Useful Help</u>, by Arnold D. Pickar
- Speed Mathematics Simplified, by Edward Stoddard
- <u>Strength in Numbers: Discovering the Joy and Power of Mathematics in Everyday Life</u>, by Sherman K. Stein
- <u>The Art of the Infinite: The Pleasures of Mathematics</u>, by Robert Kaplan
- <u>The Babylonian Theorem: The Mathematical Journey to Pythagoras and Euclid</u>, by Peter S. Rudman
- <u>The Divine Challenge: On Matter, Mind, Math, & Meaning</u>, by John Byl
- <u>The Divine Proportion</u>, by H. E. Huntley
- The (Fabulous) Fibonacci Numbers, by Alfred S. Posamentier and Ingmar Lehmann
- <u>The Heart of Mathematics: An Invitation to Effective Thinking</u>, by Michael Starbird and Edward B. Burger
- <u>The History of Pi</u>, by Petr Beckman
- <u>The Math of Money</u>, by Morton D. Davis
- The Mathematical Traveler: Exploring the Grand History of Numbers, by Calvin C. Clawson
- The Mathematical Universe: An Alphabetical Journey through the Great Proofs, Problems, and Personalities, by William Dunham

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- <u>The Mathematics of the Heavens and the Earth: The Early History of Trigonometry</u>, by Glen Van Brummelen
- <u>The Mystery of the Aleph: Mathematics, the Kabbalah, and the Search for Infinity</u>, by Amir D. Aczel
- <u>The Nothing that is: A Natural History of Zero</u>, by Robert Kaplan
- The Pleasures of Pi,e and Other Interesting Numbers, by Y E O Adrian
- The Pythagorean Theorem: A 4,000-Year History, by Eli Maor
- To Infinity and Beyond: A Cultural History of the Infinity, by Eli Maor
- Trig Or Treat: An Encyclopedia of Trigonometric Identity Proofs With Intellectually Challenging Games, by YEO Adrian
- Trigonometric Delights, by Eli Maor
- Truth and the Transcendent: The Origin, Nature, & Purpose of Mathematics, by Larry L. Zimmerman
- Weights, Money and Other Measures Used by our Ancestors, by Colin R. Chapman
- <u>When Least is Best: How Mathematicians Discovered Many Clever Ways to Make Things as</u> <u>Small (or as Large) as Possible, by Paul J. Nahin</u>
- Zero: The Biography of A Dangerous Idea, by Charles Seife