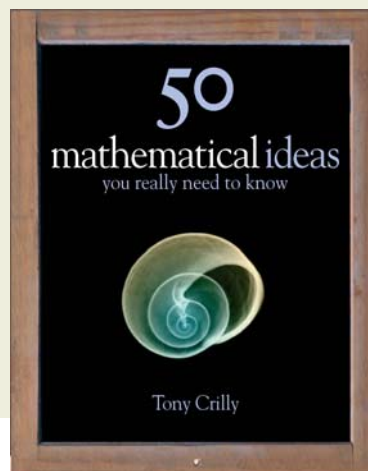


50 Mathematical Ideas You Really Need to Know

Tony Crilly

Title	50 Mathematical Ideas You Really Need to Know
Author	Tony Crilly
ISBN	9781847241474
Imprint	Quercus
Binding	Hardcover with jacket
Extent	208 pages
Dimensions	200 x 170mm
Illustrations	25 black & white
RRP	\$24.95
Release Date	September 2007



Description

Just the mention of mathematics is enough to strike fear into the hearts of many, yet without it, the human race wouldn't be where it is today. By exploring the science through its 50 key insights, from the simple (the number one) and the subtle (the invention of zero) to the sophisticated (proving Fermat's last theorem), this book shows how mathematics has changed the way we look at the world around us.

Straightforward explanations of the following big ideas are included:

Number systems	Fractions	Squares and square roots	Infinity
Imaginary numbers	Primes	Perfect numbers	Fibonacci numbers
Golden rectangles	Algebra	Pascal's triangle	Logic
Euclid's division algorithm	Proof	Set theory	Calculus
Constructivity	Triangles	Curves	Topology
Dimension	Fractals	Chaos theory	The parallel postulate
Discrete geometry	Graphs	The four-colour problem	Probability
Bayes' theory	Genetics	The birthday problem	Discrete distributions
The normal curve	Codes	Correlation and regression	Group theory
Matrix algebra	Game theory	Combinatorics	Magic squares
Money mathematics	Relativity	The Riemann hypothesis	Fermat's last theorem

Sales Points

- An accessible introduction to the central ideas of mathematics
- 50 clear and concise essays explaining the mathematical laws and principles that underpin our world
- Full glossary and index included

Author Profile

Tony Crilly is Reader in Mathematical Sciences at Middlesex University, England. He has also taught at the University of Michigan, the City University in Hong Kong, and he has been a tutor for the Open University. He has written and edited many works on the popularisation of mathematics, computing, fractals and chaos. His principal research interest is in the history of mathematics, and his definitive biography of the English mathematician Arthur Cayley was published in 2006.