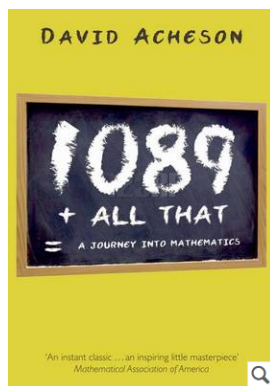
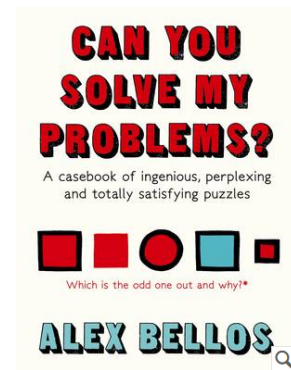
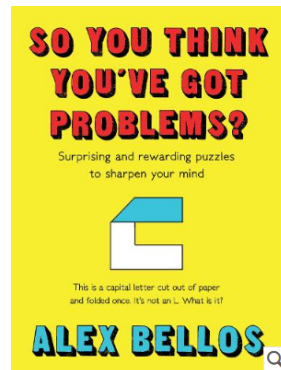
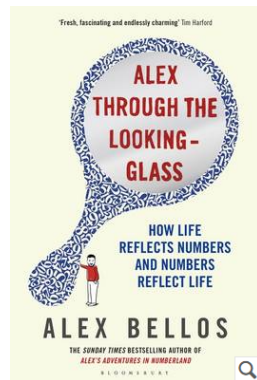
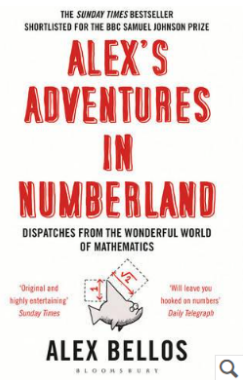


Wider Reading Examples

Maths

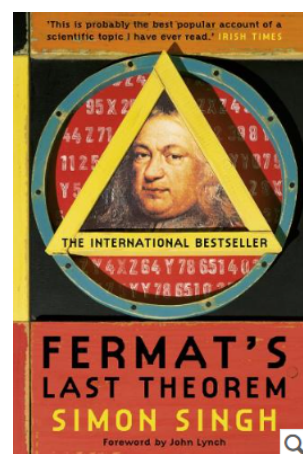
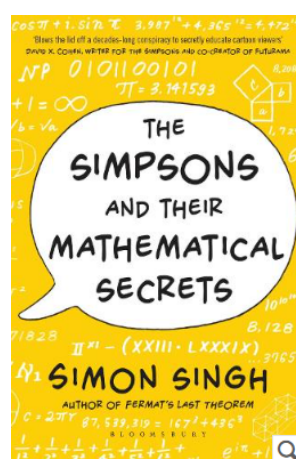
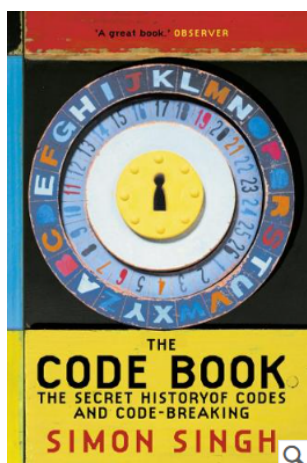
Books by Alex Bellos



1089 + All That by David Acheson

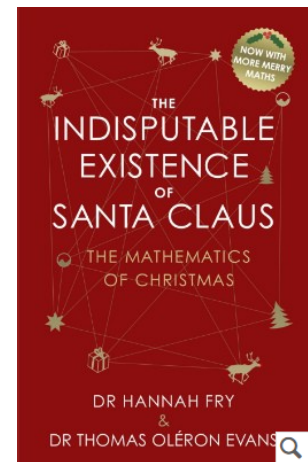
David Acheson's extraordinary little book makes mathematics accessible to everyone. From very simple beginnings he takes us on a thrilling journey to some deep mathematical ideas. On the way, via Kepler and Newton, he explains what calculus really means, gives a brief history of pi, and even takes us to chaos theory and imaginary numbers. Every short chapter is carefully crafted to ensure that no one will get lost on the journey. Packed with puzzles and illustrated by world famous cartoonists, this is one of the most readable and imaginative books on mathematics ever written.

Books by Simon Singh



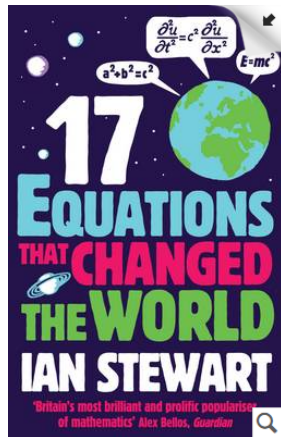
The Indisputable Existence of Santa Claus : The Mathematics of Christmas by Dr Hannah Fry and Dr Thomas Oleron Evans

- How do you apply game theory to select who should be on your Christmas shopping list ?
- Can you predict Her Majesty's Christmas Message?
- Will calculations show Santa is getting steadily thinner - shimmying up and down chimneys for a whole night - or fatter - as he tucks into a mince pie and a glass of sherry in billions of houses across the world?



Full of diagrams, sketches and graphs, beautiful equations, Markov chains and matrices, *The Indisputable Existence of Santa Claus* brightens up the bleak midwinter with stockingfuls of mathematical marvels.

And proves once and for all that maths isn't just for old men with white hair and beards who associate with elves. Maths has never been merrier.



17 Equations that Changed the World by Ian Stewart

From Newton's Law of Gravity to the Black-Scholes model used by bankers to predict the markets, equations are everywhere -- and they are fundamental to everyday life. *Seventeen Equations that Changed the World* examines seventeen ground-breaking equations that have altered the course of human history. He explores how Pythagoras's Theorem led to GPS and Satnav; how logarithms are applied in architecture; why imaginary numbers were important in the development of the digital camera, and what is really going on with Schroedinger's cat. Entertaining, surprising and vastly informative, *Seventeen Equations that Changed the World* is a highly original exploration -- and explanation -- of life on earth.

Maths on the Back of an Envelope by Rob Eastaway

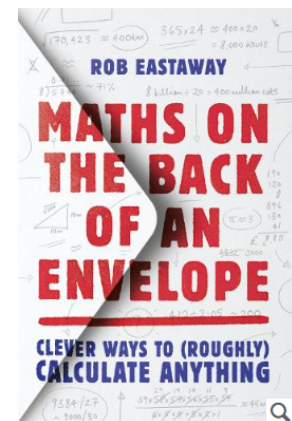
How many cats are there in the world?

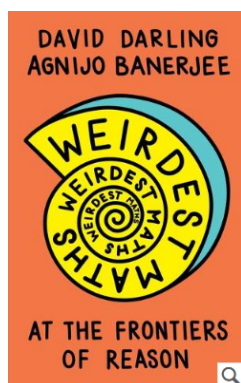
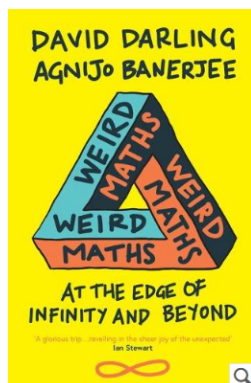
What's the chance of winning the lottery twice?

And just how long does it take to count to a million?

Learn how to tackle tricky maths problems with nothing but the back of an envelope, a pencil and some good old-fashioned brain power.

Join Rob Eastaway as he takes an entertaining look at how to figure without a calculator. Packed with amusing anecdotes, quizzes, and handy calculation tips for every situation, *Maths on the Back of an Envelope* is an invaluable introduction to the art of estimation, and a welcome reminder that sometimes our own brain is the best tool we have to deal with numbers.

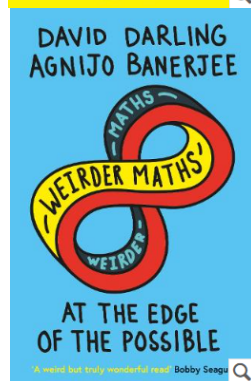




Weird Maths by David Darling and Agnijo Banerjee

Is anything truly random? Does infinity actually exist? Could we ever see into other dimensions?

In this delightful journey of discovery, David Darling and extraordinary child prodigy Agnijo Banerjee draw connections between the cutting edge of modern maths and life as we understand it, delving into the strange - would we like alien music? - and venturing out on quests to consider the existence of free will and the fantastical future of quantum computers. Packed with puzzles and paradoxes, mind-bending concepts and surprising solutions, this is for anyone who wants life's questions answered - even those you never thought to ask.



Maths is everywhere, in everything. It's in the finest margins of modern sport. It's in the electrical pulses of our hearts and the flight of every bird. It is our key to secret messages, lost languages and perhaps even the shape of the universe of itself.

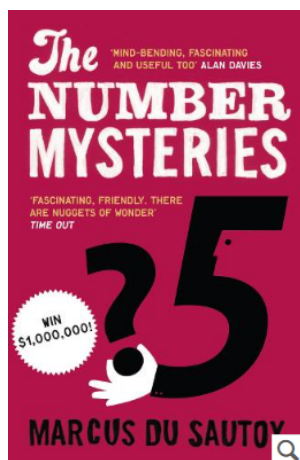
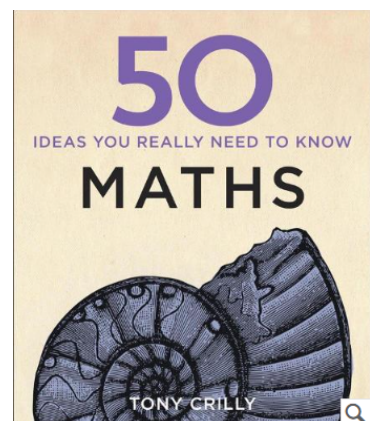
David Darling and Agnijo Banerjee reveal the mathematics at the farthest reaches of our world - from its role in the plots of novels to how animals employ numerical skills to survive. Along the way they explore what makes a genius, why a seemingly simple problem can confound the best and brightest for decades, and what might be the great discovery of the twenty-first century. As Bertrand Russell once said, 'mathematics, rightly viewed, possesses not only truth, but supreme beauty'. Banerjee and Darling make sure we see it right again.

50 Ideas You Really Need to Know : Maths by Tony Crilly

Who invented zero? Why 60 seconds in a minute? How big is infinity? Where do parallel lines meet? And can a butterfly's wings really cause a storm on the far side of the world?

In 50 Maths Ideas You Really Need to Know, Professor Tony Crilly explains in 50 clear and concise essays the mathematical concepts - ancient and modern, theoretical and practical, everyday and esoteric - that allow us to understand and shape the world around us.

Packed with diagrams, examples and anecdotes, this book is the perfect overview of this often daunting but always essential subject. For once, mathematics couldn't be simpler.



The Number Mysteries by Marcus Du Sautoy

Every time we download a song from Itunes, take a flight across the Atlantic or talk on our mobile phones, we are relying on great mathematical inventions. Maths may fail to provide answers to various of its own problems, but it can provide answers to problems that don't seem to be its own - how prime numbers are the key to Real Madrid's success, to secrets on the Internet and to the survival of insects in the forests of North America.

In 'The Number Mysteries', Marcus du Sautoy explains how to fake a Jackson Pollock; how to work out whether or not the universe has a hole in the middle of it; how to make the world's roundest football. He shows us how to see shapes in four dimensions - and how maths makes you a better gambler. He tells us about the quest to predict the future - from the flight of asteroids to an impending storm, from bending a ball like Beckham to predicting population growth.