
A Mathematician's Apology

Mathematical Lives

A History of Dancing from the Earliest Ages to Our
Own Times

Orders of Infinity

The Calculus of Friendship

Principia Mathematica

A Disappearing Number

A Mathematician's Apology

Ramanujan

Mathematics and the Historian's Craft

A Mathematician's Apology

The Man Who Knew Infinity

A Fellow of Trinity

Prime Obsession

A Course in Number Theory and Cryptography

Mathematicians as Enquirers

Mathematical Grammar of Biology

Mathematics without Apologies

Quest For A Unified Theory

The G. H. Hardy Reader

A Mathematician's Apology

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Inventing the Mathematician
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The Survival of a Mathematician
Irreversible Damage
A Mathematician's Lament

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COHEN**

*Mathematical
Lives*
Cambridge
University
Press
Considers how
our ideas
about
mathematics
shape our
individual and

cultural
relationship to
the field.
Where and
how do we, as
a culture, get
our ideas
about
mathematics
and about
who can
engage with
mathematical
knowledge?
Sara N.

Hottinger uses
a cultural
studies
approach to
address how
our ideas
about
mathematics
shape our
individual and
cultural
relationship to
the field. She
considers four
locations in

which representation s of mathematics contribute to our cultural understanding of mathematics: mathematics textbooks, the history of mathematics, portraits of mathematicians, and the field of ethnomathematics. Hottinger examines how these discourses shape mathematical subjectivity by limiting the way some groups—including women and people of color—are able

to see themselves as practitioners of math. Inventing the Mathematician provides a blueprint for how to engage in a deconstructive project, revealing the limited and problematic nature of the normative construction of mathematical subjectivity. **A History of Dancing from the Earliest Ages to Our Own Times** Princeton University Press The Calculus of Friendship

is the story of an extraordinary connection between a teacher and a student, as chronicled through more than thirty letters between them. What makes their relationship unique is that it is based almost entirely on a shared love of calculus. For them, calculus is more than a branch of mathematics; it is a game they love playing together, a constant when all else is in

flux. The teacher goes from the prime of his career to retirement, competes in whitewater kayaking at the international level, and loses a son. The student matures from high school math whiz to Ivy League professor, suffers the sudden death of a parent, and blunders into a marriage destined to fail. Yet through it all they take refuge in the haven of calculus--until

a day comes when calculus is no longer enough. Like calculus itself, *The Calculus of Friendship* is an exploration of change. It's about the transformation that takes place in a student's heart, as he and his teacher reverse roles, as they age, as they are buffeted by life itself. Written by a renowned teacher and communicator of mathematics, *The Calculus of Friendship* is warm,

intimate, and deeply moving. The most inspiring ideas of calculus, differential equations, and chaos theory are explained through metaphors, images, and anecdotes in a way that all readers will find beautiful, and even poignant. Math enthusiasts, from high school students to professionals, will delight in the offbeat problems and lucid explanations in the letters.

<p>For anyone whose life has been changed by a mentor, The Calculus of Friendship will be an unforgettable journey. <u>Orders of Infinity</u> Springer Science & Business Media Originally published in 1910 as number twelve in the Cambridge Tracts in Mathematics and Mathematical Physics series, this book provides an up-to-date version of Du Bois-Reymond's</p>	<p>Infinitärcalcül by the celebrated English mathematician G. H. Hardy. This tract will be of value to anyone with an interest in the history of mathematics or the theory of functions. The Calculus of Friendship Springer Originally published in 1915 as number eighteen in the Cambridge Tracts in Mathematics and Mathematical Physics series, and here reissued in its</p>	<p>1952 reprinted form, this book contains a condensed account of Dirichlet's Series, which relates to number theory. This tract will be of value to anyone with an interest in the history of mathematics or in the work of G. H. Hardy. <i>Principia Mathematica</i> Springer A biography of the Indian mathematician Srinivasa Ramanujan. The book gives a detailed account of his upbringing in</p>
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India, his mathematical achievements, and his mathematical collaboration with English mathematician G. H. Hardy. The book also reviews the life of Hardy and the academic culture of Cambridge University during the early twentieth century.

A
Disappearing
Number

Springer
Science &
Business
Media

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. *A Mathematician's Apology* Springer Science & Business Media In August 1859 Bernhard Riemann, a little-known 32-year old mathematician, presented a paper to the Berlin Academy titled: "On the Number of Prime Numbers Less Than a Given Quantity." In the middle of that paper, Riemann made an

incidental remark "a guess, a hypothesis. What he tossed out to the assembled mathematicians that day has proven to be almost cruelly compelling to countless scholars in the ensuing years. Today, after 150 years of careful research and exhaustive study, the question remains. Is the hypothesis true or false? Riemann's basic inquiry, the primary topic of his paper, concerned a

straightforward but nevertheless important matter of arithmetic – defining a precise formula to track and identify the occurrence of prime numbers. But it is that incidental remark – the Riemann Hypothesis – that is the truly astonishing legacy of his 1859 paper. Because Riemann was able to see beyond the pattern of the primes to discern traces of something

mysterious and mathematically elegant shrouded in the shadows – subtle variations in the distribution of those prime numbers. Brilliant for its clarity, astounding for its potential consequences, the Hypothesis took on enormous importance in mathematics. Indeed, the successful solution to this puzzle would herald a revolution in prime number theory. Proving or

disproving it became the greatest challenge of the age. It has become clear that the Riemann Hypothesis, whose resolution seems to hang tantalizingly just beyond our grasp, holds the key to a variety of scientific and mathematical investigations. The making and breaking of modern codes, which depend on the properties of the prime numbers, have roots in the Hypothesis. In a series of

extraordinary developments during the 1970s, it emerged that even the physics of the atomic nucleus is connected in ways not yet fully understood to this strange conundrum. Hunting down the solution to the Riemann Hypothesis has become an obsession for many — the veritable "great white whale" of mathematical research. Yet despite determined efforts by generations of mathematicians,

the Riemann Hypothesis defies resolution. Alternating passages of extraordinarily lucid mathematical exposition with chapters of elegantly composed biography and history, *Prime Obsession* is a fascinating and fluent account of an epic mathematical mystery that continues to challenge and excite the world. Posited a century and a half ago, the Riemann Hypothesis is an intellectual

feast for the cognoscenti and the curious alike. Not just a story of numbers and calculations, *Prime Obsession* is the engrossing tale of a relentless hunt for an elusive proof — and those who have been consumed by it. Ramanujan Bloomsbury Publishing loan James introduces and profiles sixty mathematicians from the era when mathematics

was freed from its classical origins to develop into its modern form. The subjects, all born between 1700 and 1910, come from a wide range of countries, and all made important contributions to mathematics, through their ideas, their teaching, and their influence. James emphasizes their varied life stories, not the details of their mathematical achievements.

The book is organized chronologically into ten chapters, each of which contains biographical sketches of six mathematicians. The men and women James has chosen to portray are representative of the history of mathematics, such that their stories, when read in sequence, convey in human terms something of the way in which mathematics developed. Joan James is a professor at

the Mathematical Institute, University of Oxford. He is the author of *Topological Topics* (Cambridge, 1983), *Fibrewise Topology* (Cambridge, 1989), *Introduction to Uniform Spaces* (Cambridge, 1990), *Topological and Uniform Spaces* (Springer-Verlag New York, 1999), and co-author with Michael C. Crabb of *Fibrewise Homotopy Theory* (Springer-

Verlag New York, 1998). James is the former editor of the London Mathematical Society Lecture Note Series and volume editor of numerous books. He is the organizer of the Oxford Series of Topology symposia and other conferences, and co-chairman of the Task Force for Mathematical Sciences of Campaign for Oxford.

Mathematics and the Historian's Craft Springer Science &

Business Media
G. H. Hardy ranks among the greatest twentieth-century mathematicians. This book introduces this extraordinary individual and his writing.

A
Mathematician's Apology Mathematical Association of America
"One of the best critiques of current mathematics education I have ever seen."—Keith Devlin, math columnist on NPR's Morning Edition A brilliant research

mathematician who has devoted his career to teaching kids reveals math to be creative and beautiful and rejects standard anxiety-producing teaching methods. Witty and accessible, Paul Lockhart's controversial approach will provoke spirited debate among educators and parents alike and it will alter the way we think about math forever. Paul Lockhart, has taught

<p>mathematics at Brown University and UC Santa Cruz. Since 2000, he has dedicated himself to K-12 level students at St. Ann's School in Brooklyn, New York.</p> <p><u>The Man Who Knew Infinity</u> Simon and Schuster</p> <p>This is part two of a two-volume book on real analysis and is intended for senior undergraduate students of mathematics who have already been exposed to calculus. The emphasis is</p>	<p>on rigour and foundations of analysis. Beginning with the construction of the number systems and set theory, the book discusses the basics of analysis (limits, series, continuity, differentiation, Riemann integration), through to power series, several variable calculus and Fourier analysis, and then finally the Lebesgue integral. These are almost entirely set in the concrete</p>	<p>setting of the real line and Euclidean spaces, although there is some material on abstract metric and topological spaces. The book also has appendices on mathematical logic and the decimal system. The entire text (omitting some less central topics) can be taught in two quarters of 25–30 lectures each. The course material is deeply intertwined with the exercises, as</p>
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it is intended that the student actively learn the material (and practice thinking and writing rigorously) by proving several of the key results in the theory. A Fellow of Trinity Cambridge University Press First published in 1999. Volume 13 in the 13-volume set titled World Futures General Evolution Studies with a common focus of the emerging field of general evolutionary

theory. This volume will expand across disciplines where scholars from new fields will contribute books that propose general evolution theory in novel contexts. The essays are structured with five topics: Approaches to Unification; Concepts of Information; Self-Organizing Systems; Life and Consciousness ; Society and Technology. Prime Obsession

Cambridge University Press I am very pleased that my books about David Hilbert, published in 1970, and Richard Courant, published in 1976, are now being issued by Springer Verlag in a single volume. I have always felt that they belonged together, Courant being, as I have written, the natural and necessary sequel to Hilbert the rest of the story. To make the two

volumes more compatible when published as one, we have combined and brought up to date the indexes of names and dates. Unfortunately we have had to omit Hermann Weyl's article on "David Hilbert and his mathematical work," but the interested reader can always find it in the hard back edition of Hilbert and in Weyl's collected papers. At the request of a number of readers we

have included a listing of all of Hilbert's famous Paris problems. It was, of course, inevitable that we would give the resulting joint volume the title Hilbert-Courant. *A Course in Number Theory and Cryptography* American Mathematical Soc. The Kenneth May Lectures have never before been published in book form. Important contributions to the history of mathematics

by well-known historians of science. Should appeal to a wide audience due to its subject area and accessibility.

Mathematicians as Enquirers

Bellevue Literary Press

NAMED A BOOK OF THE YEAR BY THE ECONOMIST AND ONE OF THE BEST BOOKS OF 2021 BY THE TIMES AND THE SUNDAY TIMES

"Irreversible Damage . . . has caused a storm. Abigail Shrier, a Wall Street Journal writer, does

something simple yet devastating: she rigorously lays out the facts." —Janice Turner, *The Times of London* Until just a few years ago, gender dysphoria—severe discomfort in one's biological sex—was vanishingly rare. It was typically found in less than .01 percent of the population, emerged in early childhood, and afflicted males almost exclusively.

But today whole groups of female friends in colleges, high schools, and even middle schools across the country are coming out as "transgender." These are girls who had never experienced any discomfort in their biological sex until they heard a coming-out story from a speaker at a school assembly or discovered the internet community of trans "influencers." Unsuspecting

parents are awakening to find their daughters in thrall to hip trans YouTube stars and "gender-affirming" educators and therapists who push life-changing interventions on young girls—including medically unnecessary double mastectomies and puberty blockers that can cause permanent infertility. Abigail Shrier, a writer for the *Wall Street Journal*, has dug deep into the trans epidemic,

talking to the girls, their agonized parents, and the counselors and doctors who enable gender transitions, as well as to “detransitioners”—young women who bitterly regret what they have done to themselves. Coming out as transgender immediately boosts these girls’ social status, Shrier finds, but once they take the first steps of transition, it is not easy to walk back. She offers urgently needed advice

about how parents can protect their daughters. A generation of girls is at risk. Abigail Shrier’s essential book will help you understand what the trans craze is and how you can inoculate your child against it—or how to retrieve her from this dangerous path. Mathematical Grammar of Biology Oxford Paperbacks SHORTLISTED FOR THE 2017 ROYAL SOCIETY SCIENCE BOOK PRIZE Even small

children know there are infinitely many whole numbers - start counting and you'll never reach the end. But there are also infinitely many decimal numbers between zero and one. Are these two types of infinity the same? Are they larger or smaller than each other? Can we even talk about 'larger' and 'smaller' when we talk about infinity? In Beyond Infinity, international maths

sensation
 Eugenia
 Cheng reveals
 the inner
 workings of
 infinity. What
 happens when
 a new guest
 arrives at your
 infinite hotel -
 but you
 already have
 an infinite
 number of
 guests? How
 does infinity
 give Zeno's
 tortoise the
 edge in a
 paradoxical
 foot-race with
 Achilles? And
 can we really
 make an
 infinite
 number of
 cookies from a
 finite amount
 of cookie
 dough?
 Wielding an
 armoury of

inventive,
 intuitive
 metaphor,
 Cheng draws
 beginners and
 enthusiasts
 alike into the
 heart of this
 mysterious,
 powerful
 concept to
 reveal
 fundamental
 truths about
 mathematics,
 all the way
 from the
 infinitely large
 down to the
 infinitely
 small.
*Mathematics
 without
 Apologies*
 Joseph Henry
 Press
 Steps forward
 in
 mathematics
 often
 reverberate in
 other scientific

disciplines,
 and give rise
 to innovative
 conceptual
 developments
 or find
 surprising
 technological
 applications.
 This volume
 brings to the
 forefront some
 of the
 proponents of
 the
 mathematics
 of the
 twentieth
 century, who
 have put at
 our disposal
 new and
 powerful
 instruments
 for
 investigating
 the reality
 around us.
 The portraits
 present
 people who
 have

impressive charisma and wide-ranging cultural interests, who are passionate about defending the importance of their own research, are sensitive to beauty, and attentive to the social and political problems of their times. What we have sought to document is mathematics' central position in the culture of our day. Space has been made not only for the great mathematicians but also for literary texts,

including contributions by two apparent interlopers, Robert Musil and Raymond Queneau, for whom mathematical concepts represented a valuable tool for resolving the struggle between 'soul and precision.' Quest For A Unified Theory Springer Science & Business Media The Principia Mathematica has long been recognised as one of the intellectual landmarks of the century. **The G. H.**

Hardy Reader

Hachette UK "One of the themes of the book is how to have a fulfilling professional life. In order to achieve this goal, Krantz discusses keeping a vigorous scholarly program going and finding new challenges, as well as dealing with the everyday tasks of research, teaching, and administration ." "In short, this is a survival manual for the professional

<p>mathematician - both in academics and in industry and government agencies. It is a sequel to the author's <i>A Mathematician's Survival Guide</i>."--BOOK JACKET.</p>	<p>A <i>Mathematician's Apology</i> SUNY Press Another excellent book long out of print but much in demand. This book is pulled together by Ramanujan's</p>	<p>primary mentor, G. H. Hardy, who was the first to recognize the amazing nature of Ramanujan's ideas. Another exceptional classic from the Chelsea list.</p>
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