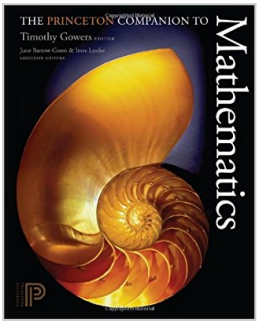

The Princeton Companion to Mathematics

From imusti

The Princeton Companion to Mathematics From imusti

This is a one-of-a-kind reference for anyone with a serious interest in mathematics. Edited by Timothy Gowers, a recipient of the Fields Medal, it presents nearly two hundred entries, written especially for this book by some of the world's leading mathematicians, that introduce basic mathematical tools and vocabulary; trace the development of modern mathematics; explain essential terms and concepts; examine core ideas in major areas of mathematics; describe the achievements of scores of famous mathematicians; explore the impact of mathematics on other disciplines such as biology, finance, and music--and much, much more.

Unparalleled in its depth of coverage, *The Princeton Companion to Mathematics* surveys the most active and exciting branches of pure mathematics. Accessible in style, this is an indispensable resource for undergraduate and graduate students in mathematics as well as for researchers and scholars seeking to understand areas outside their specialties.

- Features nearly 200 entries, organized thematically and written by an international team of distinguished contributors
- Presents major ideas and branches of pure mathematics in a clear, accessible style
- Defines and explains important mathematical concepts, methods, theorems, and open problems
- Introduces the language of mathematics and the goals of mathematical research
- Covers number theory, algebra, analysis, geometry, logic, probability, and more
- Traces the history and development of modern mathematics
- Profiles more than ninety-five mathematicians who influenced those working today
- Explores the influence of mathematics on other disciplines
- Includes bibliographies, cross-references, and a comprehensive index

Contributors incude:

Graham Allan, Noga Alon, George Andrews, Tom Archibald, Sir Michael Atiyah, David Aubin, Joan Bagaria, Keith Ball, June Barrow-Green, Alan Beardon, David D. Ben-Zvi, Vitaly Bergelson, Nicholas Bingham, Béla Bollobás, Henk Bos, Bodil Branner, Martin R. Bridson, John P. Burgess, Kevin

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Editorial Review

Review
Winner of the 2011 Euler Book Prize, Mathematical Association of America
Honorable Mention for the 2008 PROSE Award for Single Volume Reference/Science, Association of American Publishers
One of *Choice*'s Outstanding Academic Titles for 2009

"*The Princeton Companion to Mathematics* makes a heroic attempt to keep [abstract concepts] to a minimum . . . and conveys the breadth, depth and diversity of mathematics. It is impressive and well written and it's good value for [the] money."**--Ian Stewart, *The Times***

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"This impressive book represents an extremely ambitious and, I might add, highly successful attempt by Timothy Gowers and his coeditors, June Barrow-Green and Imre Leader, to give a current account of the subject of mathematics. It has something for nearly everyone, from beginning students of mathematics who would like to get some sense of what the subject is all about, all the way to professional mathematicians who would like to get a better idea of what their colleagues are doing. . . . If I had to choose just one book in the world to give an interested reader some idea of the scope, goals and achievements of modern mathematics, without a doubt this would be the one. So try it. I guarantee you'll like it!"**--*American Scientist***

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seeking to understand areas outside their specialties."**--*Library Journal***

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"I think that this is a wonderful book, completely different from anything that has been written before about mathematics and mathematicians."**--Endre Süli, University of Oxford**

"*The Princeton Companion to Mathematics* is a much needed--and will become a much used--reference work. In fact, it will stand alone as the reference work in mathematics."**--John J. Watkins, Colorado College**

About the Author

Timothy Gowers is the Rouse Ball Professor of Mathematics at the University of Cambridge. He received the Fields Medal in 1998, and is the author of "Mathematics: A Very Short Introduction". June Barrow-

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