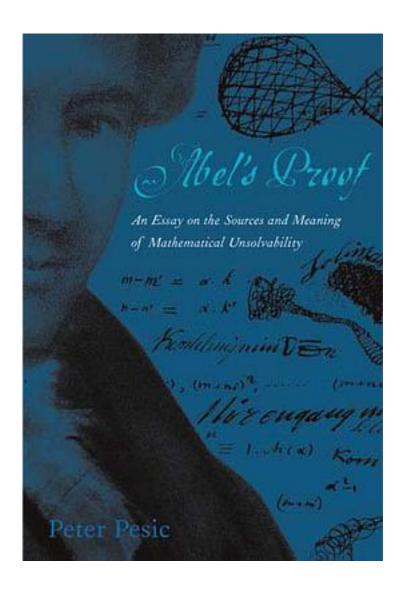
Abel's Proof



Abel's Proof_下载链接1_

著者:Peter Pesic

出版者:The MIT Press

出版时间:2004-04-01

装帧:Paperback

isbn:9780262661829

In 1824 a young Norwegian named Niels Henrik Abel proved conclusively that algebraic equations of the fifth order are not solvable in radicals. In this book Peter Pesic shows what an important event this was in the history of thought. He also presents it as a remarkable human story. Abel was twenty-one when he self-published his proof, and he died five years later, poor and depressed, just before the proof started to receive wide acclaim. Abel's attempts to reach out to the mathematical elite of the day had been spurned, and he was unable to find a position that would allow him to work in peace and marry his fiancée.

But Pesic's story begins long before Abel and continues to the present day, for Abel's proof changed how we think about mathematics and its relation to the "real" world. Starting with the Greeks, who invented the idea of mathematical proof, Pesic shows how mathematics found its sources in the real world (the shapes of things, the accounting needs of merchants) and then reached beyond those sources toward something more universal. The Pythagoreans' attempts to deal with irrational numbers foreshadowed the slow emergence of abstract mathematics. Pesic focuses on the contested development of algebra—which even Newton resisted—and the gradual acceptance of the usefulness and perhaps even beauty of abstractions that seem to invoke realities with dimensions outside human experience. Pesic tells this story as a history of ideas, with mathematical details incorporated in boxes. The book also includes a new annotated translation of Abel's original proof.

作者介绍:

Peter Pesic is Tutor and Musician-in-Residence at St. John's College, Santa Fe. He is the author of Labyrinth: A Search for the Hidden Meaning of Science; Seeing Double: Shared Identities in Physics, Philosophy, and Literature; Abel's Proof: An Essay on the Sources and Meaning of Mathematical Unsolvability; and Sky in a Bottle, all published by the MIT Press.

目录:

Abel's Proof 下载链接1

标签

数学

科学史

数学史

评论

The parts on history of math and biographies are inspiring or at least entertaining, but the presentation of math lacks clarity. The author sacrificed precision for a reduction in the number of formal statements; paradoxically this makes some math really hard to follow, at least for someone used to using precise mathematical language.

Abel's Proof_下载链接1_

书评

Abel's Proof_下载链接1_