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Reviews

'Mathematics: a Very Short Introduction'

reviewed by Helen Joyce
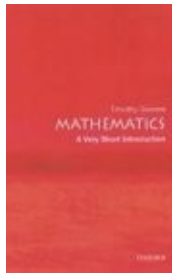
Mathematics: a Very Short Introduction

One of Oxford University Press's series of "Short Introductions", this book is a rigorous and challenging description, by one of the greatest pure mathematicians alive (Timothy Gowers is Rouse Ball Professor of Mathematics at the University of Cambridge, and a Fields Medal recipient), of what mathematics is. Perhaps too challenging, in fact – on page 23 we are introduced to an axiomatisation of number systems, and things only get tougher. Clearly, as one of a highly intellectual series, the book is intended to stretch its readers' abilities to the utmost.

Although the book is beautifully written and a clearer exposition could not be imagined, I hesitate to recommend it to anyone who doesn't already know a substantial amount of mathematics – it is just too difficult. Even though mathematics students and professional mathematicians will know all the results presented, they should enjoy the path taken through them. However, the people most likely to benefit from this book are (very) clever, well−educated sixth−form students who are seriously considering doing a maths degree (why not read it if you are attending university interviews at the moment?); and philosophers who want to learn something about the philosophy of mathematics from one of its greatest practitioners.

Since an introduction is usually made between two parties who are not yet acquainted, and the book consists in large part of material from a reasonably challenging undergraduate course in pure mathematics, it is quite probable that some of the people who bought it never got any further than page 23. This is a pity, because what Timothy Gowers has to say about what mathematics is, and how and why it is done, deserves a hearing.

Book details:

Mathematics: a Very Short Introduction
Timothy Gowers
paperback – 156 pages (2002)
Oxford Paperbacks
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