



The Foundations of Mathematics (2nd Revised edition)

By Ian Stewart, David Tall

Oxford University Press. Paperback. Book Condition: new. BRAND NEW, The Foundations of Mathematics (2nd Revised edition), Ian Stewart, David Tall, The transition from school mathematics to university mathematics is seldom straightforward. Students are faced with a disconnect between the algorithmic and informal attitude to mathematics at school, versus a new emphasis on proof, based on logic, and a more abstract development of general concepts, based on set theory. The authors have many years' experience of the potential difficulties involved, through teaching first-year undergraduates and researching the ways in which students and mathematicians think. The book explains the motivation behind abstract foundational material based on students' experiences of school mathematics, and explicitly suggests ways students can make sense of formal ideas. This second edition takes a significant step forward by not only making the transition from intuitive to formal methods, but also by reversing the process- using structure theorems to prove that formal systems have visual and symbolic interpretations that enhance mathematical thinking. This is exemplified by a new chapter on the theory of groups. While the first edition extended counting to infinite cardinal numbers, the second also extends the real numbers rigorously to larger ordered fields. This links intuitive ideas...



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Reviews

Extensive information for book fans. It is writter in basic words and never hard to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Otis Wisoky

This publication is great. It is full of wisdom and knowledge You will not really feel monotony at at any time of the time (that's what catalogs are for relating to when you ask me).

-- Dr. Everett Dicki DDS