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<<数学实验MATHEMATICS EXPE>>

图书基本信息

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内容概要

Owing to the advent of computers, experiments are becoming an increasingly important part of mathematics. This book provides guidance to students doing experiments in mathematics. The aim is to stimulate interest in mathematics through examples and experiments. Each experiment in the book starts with an interesting problem. The students are expected to work with these problems on computers, try to find the solutions themselves, and experience the scientific exploration in the process. The problems which the authors have chosen cover a wide spectrum in mathematics, ranging from calculus, number theory, coding and probability to geometry and chaos. They are introduced in a simple way and yet show great depth. The discussions are thorough but not lengthy. This book is useful not only to mathematics students, but also to students in all areas of sciences who are interested in learning some of the mathematical tools. It provides a hands-on approach to the most fundamental issues in mathematics — an approach which may help to revolutionize the teaching of mathematics.

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