

《Math Made Visual数学创》

图书基本信息

书名：《Math Made Visual数学创作视觉》

13位ISBN编号：9780883857465

10位ISBN编号：0883857464

出版时间：2006-4-10

出版社：Mathematical Assn of Amer

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页数：172

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内容概要

The object of this book is to show how visualization techniques may be employed to produce pictures that have interest for the creation, communication and teaching of mathematics. Mathematical drawings related to proofs have been produced since antiquity in China, Arabia, Greece and India but only in the last thirty years has there been a growing interest in so-called 'proofs without words.' In this book the authors show that behind most of the pictures 'proving' mathematical relations are some well-understood methods. The first part of the book consists of twenty short chapters, each one describing a method to visualize some mathematical idea (a proof, a concept, an operation,...) and several applications to concrete cases. Following this the book examines general pedagogical considerations concerning the development of visual thinking, practical approaches for making visualizations in the classroom and a discussion of the role that hands-on material plays in this process.

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书籍目录

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