Preface

The editors of this book have worked to select articles from past issues of the NCTM Journals that are relevant in classrooms today. Each article includes activities for teachers to use with their students to promote understanding of the mathematical content highlighted in the article. The selected articles were organized into content strands and ordered within a strand to promote the development of important areas of mathematics. These mathematical areas are all highlighted in the Common Core State Standards for Mathematics (CCSSM) as important for students' progress in mathematics.

The book's first section, "Designing and Enacting Rich Instructional Experiences," provides an important set of articles that individual teachers can use to enhance their students' engagement in rich mathematical tasks. A school or district can also use these articles in professional development settings. The section aims to help teachers examine their classroom practices with an eye toward improving students' engagement with, and success in, learning to think and reason in rich mathematical situations.

Each remaining section of the book highlights articles on an important area of mathematics promoted in the CCSSM: rational numbers, proportional reasoning, numbers, number theory, patterns and functions, linear equations, measurement, geometry, and probability and statistics. Each article in a section has a mathematical exploration on the focus topic, ready to copy and use with students.

A team of three NCTM members—two professors, Glenda Lappan at Michigan State University and Margaret "Peg" Smith at the University of Pittsburgh, and an outstanding middle school teacher in the Lansing, Mich., School District, Elizabeth "Liz" Jones—selected the articles. Our different perspectives were invaluable to the selection process. We hope these selected articles can help you enliven your classroom and push your students' mathematical creativity.

Lastly, additional articles for each content strand are available in NCTM's e-book, *More Rich and Engaging Mathematical Tasks: Grades 5–9*, which can be purchased at www.nctm.org/catalog. We hope that you will enjoy the articles as we have grouped them, and that you find them useful in challenging your students and in enlivening your students' engagement in mathematical thinking and reasoning.



The activity sheets and exercises that are in this book are available as PDF downloads through NCTM's More4U online resource center. Simply go to www.nctm.org/more4u and enter the access code that is on the title page of this book.