

Preface

This e-book contains additional articles for each content strand in *Rich and Engaging Mathematical Tasks: Grades 5–9*. The editors of both publications 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. These mathematical areas are all highlighted in the Common Core State Standards for Mathematics (CCSSM) as important for students' progress in mathematics.

The 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, 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.

Acknowledgments

The Editors of this volume would like to express our deep appreciation and thanks to Jean Beland for her considerable effort to ensure that the work on this volume was done on time and of high quality. Jean organized our work, kept us on task, edited our writing, kept track of the strand articles, organized our face-to-face and phone conferences and most of all, advocated for the teachers who would use this work with their students. Jean's patient editing of our writing through multiple iterations has made the text material in the volume clearer, more to the point, and more helpful to those who use the volume. Her joy in doing something good for students and their teachers was a gift to the editors that made our work together so much more enjoyable.

We would also like to express our appreciation to Chelsea Maxson for her assistance during the volume preparation. Chelsea worked on locating journal articles and books relevant to our work, assisted in building the reference list, and helped in organizing the work and maintaining the flow among editors.

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