

Principles and Standards
for School Mathematics

NAVIGATIONS
SERIES



Navigating *through* Measurement *in* Grades 9–12



NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS



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Measurement

Navigating through Measurement in Grades 9–12

By Masha R. Albrecht, Maurice J. Burke, Wade Ellis, Jr., Dan Kennedy, and Evan M. Maletsky

Measurement, one of the most fundamental mathematical processes, is indispensable to the study of all branches of mathematics. Measurement pervades daily activities, and measurement skills and tools are frequently applied in science, art, music, and social studies.

Throughout history, the need for more sophisticated measurements has led to the discovery of more sophisticated mathematics. This book highlights this important idea in activities that help students explore an array of measurement strategies and techniques. Investigations probe ancient methods for accomplishing such tasks as measuring the speed of ships at sea and estimating the distance of the sun from the earth. Students apply simple formulas to measure complex shapes, explore iterative processes that lead to measurement formulas, and develop an original formula for measuring the size of a tree. They also discover how to use advanced technology to make measurements and mathematical models of complex real-world phenomena.

The Navigations Series translates *Principles and Standards for School Mathematics* into action. Each book includes practical, teacher-tested activities and a supplemental CD-ROM that features applets for students' use and resources for teachers' professional development.

NCTM offers a variety of professional development opportunities that are supported by the Navigations Series and also address other mathematical subjects. Visit www.nctm.org for more information on all of NCTM's resources, including professional development offerings and publications available in the online catalog.



The *Navigating through Measurement in Grades 9–12* CD includes:

- Blackline masters
- Selected articles in PDF format
- Applets, and more...

System Requirements:

- Macintosh® and Windows® compatible.
- Recommended browser is Internet Explorer 5.
- Adobe® Acrobat® Reader 4 or above is required for viewing PDFs.