From the President

With the interest generated by the publication in 2006 of Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence, we were frequently asked, “When are you going to do something for high school?” In January 2007, the NCTM Board of Directors charged a group of writers with the task of producing a “conceptual framework to guide the development of future publications and tools related to 9–12 mathematics curriculum and instruction.” With this publication, I am pleased to present the product of that charge: Focus in High School Mathematics: Reasoning and Sense Making.

The writing group decided to address high school mathematics by focusing on students’ reasoning and sense making, which are at the core of all mathematical learning and understanding. Reasoning is the process of drawing conclusions based on evidence or stated assumptions—extending the knowledge that one has at a given moment. Sense making is developing understanding of a situation, concept, or context by connecting it with existing knowledge. Reasoning and sense making are at the heart of mathematics from early childhood through adulthood. A high school mathematics curriculum based on reasoning and sense making will prepare students for higher learning, the workplace, and productive citizenship.

On behalf of the Board of Directors, I want to express my deep gratitude to W. Gary Martin for his tireless efforts in leading this project and to thank everyone who made this publication possible. The writers of Focus in High School Mathematics: Reasoning and Sense Making include mathematics educators and high school teachers, an administrator, mathematicians, and a statistician. Their contributions will guide the further development and improvement of high school mathematics education for years to come. I also extend sincere thanks to the planning group for their guidance throughout the process and to all those who submitted reviews through the development process for helping to shape this publication.

Henry S. Kepner Jr.
President, National Council of Teachers of Mathematics