



Focus in High School Mathematics

Reasoning and Sense Making

J. Michael Shaughnessy
Beth Chance
Henry Kranendonk

Statistics and Probability



NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS

Focus in High School Mathematics: Reasoning and Sense Making in Statistics and Probability

Reasoning about and making sense of statistics and probability are essential to students' future success. This volume is one of a series of books that support NCTM's *Focus in High School Mathematics: Reasoning and Sense Making* by providing additional guidance for making reasoning and sense making part of the mathematics experiences of all high school students every day.

Six investigations provide examples of ways to help high school students develop their reasoning about data. The authors show students defining a statistical question, gathering data, constructing and comparing representations of data, and working with samples and simulations. The students reason about distributions of data and sampling distributions as they investigate variability and use a variety of statistical tools and techniques to detect trends, make predictions, and determine the allowable scope of inferences.

The authors examine the key elements of statistical reasoning identified in *Focus in High School Mathematics: Reasoning and Sense Making* in more detail and elaborate on the associated statistical reasoning habits.

The development of statistical reasoning must be a high priority for school mathematics. This book offers a blueprint for emphasizing statistical reasoning and sense making in the high school curriculum.

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