

**ZMATH 2011a.00800**

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**Focus in high school mathematics. Reasoning and sense making in statistics and probability.**

Reston, VA: National Council of Teachers of Mathematics (NCTM) (ISBN 978-0-87353-642-4). ix, 117 p. (2009).

Publisher's description: Reasoning about and making sense of statistics and probability are essential to students' future success. This volume belongs to a series that supports 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 illustrate how to help high school students develop their skills in working with data. The investigations emphasize the roles of reasoning and sense making in defining a statistical question and collecting, analyzing, and interpreting data to answer it. The authors examine the key elements of statistical reasoning identified in Focus in High School Mathematics: Reasoning and Sense Making and elaborate on the associated reasoning habits. The investigations show how students can use these habits in analyzing data sets, constructing and comparing representations of data, and using samples and simulations to gather data. They reason about distributions of data and how to use measures of center, lines of best fit, and other tools and techniques to detect trends, make predictions, and determine the allowable scope of conclusions. 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.

*Classification:* K14 D44