

Ants, bikes, and clocks: problem solving for undergraduates

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Abstrak

Mathematics educators agree that problem solving is one of the essential skills their students should possess, yet few mathematics courses or textbooks are devoted entirely to developing this skill. Supported by narrative, examples, and exercises, *Ants, Bikes, and Clocks: Problem Solving for Undergraduates* is a readable and enjoyable text designed to strengthen the problem-solving skills of undergraduate students. The book, which provides hundreds of mathematical problems, gives special emphasis to problems in context, often called story problems or modeling problems, that require mathematical formulation as a preliminary step. Both analytical and computational approaches, as well as the interplay between them, are included. With its lively and engaging writing style and interesting and entertaining problems, *Ants, Bikes, and Clocks* will strengthen students' mathematical skills, introduce them to new mathematical ideas, demonstrate for them the connectedness of mathematics, and improve both their analytical and computational problem solving. One of the remarkable and unusual features of this text is that it encourages students to use the computer for experimentation. In fact, Briggs uses a variety of tricks that encourage students to use any tool at hand to test their ideas.