

MAA MathFest 2009 SIGMAA-QL

**Encouraging Problem-Solving the First Day of Class**

Mike Pinter, Belmont University

I will describe a specific problem that I've been able to use very effectively the first day of class for both an introductory quantitative reasoning course and for an Honors Program course. The problem is simple for the students to understand but eludes a quick solution; for those reasons, students of varying ability levels find something both understandable and challenging about the problem. As the students work in small groups on the problem, I guide them through several aspects of problem solving, such as: be clear about the "rules" of the problem; start with a smaller version of the given problem in order to gain insight and to generate some data; look for patterns in data that's been generated, conjecturing and testing along the way. So, in addition to ideas of problem solving, I also establish a collaborative approach to the course where students help each other and I guide their efforts. Students leave class the first day with a true taste of the problem-solving they will encounter many places in the course.