1023-G1-684

Ioana Mihaila* (imihaila@csupomona.edu), Dept. of Mathematics and Statistics, Cal Poly Pomona, 3801 W. Temple Ave., Pomona, CA 91768, and Patricia Hale (phale@csupomona.edu), Dept. of Mathematics and Statistics, Cal Poly Pomona, 3801 W. Temple Ave., Pomona, CA 91768. Teaching Concepts and Problems Solving Skills through Mathematical Stories. Preliminary report.

Middle school mathematics teachers must understand that teaching mathematics is not teaching rules, but teaching understanding. A course for prospective middle school math teachers was developed to build problem solving skills and the ability to carefully plan, gather and present good problems in the middle school mathematics classroom. In this course, for content areas relevant to the middle school curriculum, a problem set is created which tells a mathematical story: how concepts get developed, how to make generalizations, how different strategies combine for finding solutions. Each set of problems will guide the students from routine exercises to solving very challenging problems. Examples of problem sets will be given. (Received September 20, 2006)