# COUNTING PROBLEM STRATEGIES OF PRESERVICE AND INSERVICE TEACHERS
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"Counting problems" are a class of problems in which the solver is asked to determine the number of possible ways a set of requirements can be satisfied. Students are often taught to use combinatorial formulas, such as permutation or combination formulas, to solve such problems. However, it is common for students to incorrectly apply such formulas. Heuristics, such as "looking for whether or not order matters," can be unhelpful or misleading. We will discuss an ongoing analysis of preservice and inservice secondary and community-college level teachers' responses to six counting problems in order to determine the strategy or formula used in attempting to solve the problem. We are particularly interested in whether or not an explicit statement about order "mattering" helps or hinders the participants' ability to choose an appropriate strategy.