1021-97-149 Karen S. Adams* (kadams@wilson.edu), 1015 Philadelphia Avenue, Chambersburg, PA 17201, and Xiao-Xiong Gan. Proving Minkowski's Inequality as a Tool for Student Research.

Many undergraduate curriculums in mathematics now include some form of a research project. However, even talented students often remain at a loss on exactly how to proceed. Instructors are faced with trying to identify an area of student research that is sufficiently complex so that there is little or no existing results already produced and at the same time trying to insure that the student has the tools necessary to proceed as independently as possible. Most students end up relying heavily on their advisors, but there is help available. In his article, "But How Do I Do Mathematical Research?" (Suzuki, 2004) suggests that by first categorizing mathematical research students may find it easier to plan and navigate their own research. This paper focuses on the category of reproof as a method of research and uses mathematical induction to reprove a discrete case of the Minkowski inequality. (Received September 03, 2006)