

1046-Z1-601

Anthony D. Berard, Jr.* (anthonyberard@kings.edu), Department of Mathematics, King's College, North River Street, Wilkes-Barre, PA 18711. *A Research Project for a Beginning Mathematics Student.*

We will discuss a research project for first-year mathematics major. The project is to design a small axiom system. We will discuss the background needed by the student. Additionally, we will discuss independence and consistency of axiom systems and how the student may ensure that his/her axiom system satisfies those properties. Within the framework of this project the student will use direct and indirect arguments. In addition to learning how to prove certain statements the student will also learn how to show that it is impossible to prove other statements. (Received September 08, 2008)