

1046-Z1-1978      **Russell D Blyth\*** (blythrd@slu.edu), Dept. of Mathematics and Computer Science, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103, and **Julianne G Rainbolt** (rainbolt@slu.edu), Dept. of Mathematics and Computer Science, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103. *Discovering Theorems in Abstract Algebra using GAP.*

We describe a method that helps students in an abstract algebra course discover classical theorems before they are stated and proved, with the help of leading questions and the software Groups, Algorithms and Programming (GAP). We illustrate the method with several examples. (Received September 16, 2008)