962-J1-401   **Peter Blanchard*** (`blanchard@denison.edu`), Department of Mathematics, Denison University, Granville, OH, and **Judy A Holdener** (`holdenerj@kenyon.edu`), Department of Mathematics, Kenyon College, Gambier, OH 43022. *Increasing Accessibility of Examples in Abstract Algebra Using GAP.*

In studying abstract algebra, the process of experimentation, conjecture, and proof is strongly inhibited by a lack of data. While it is true that a good textbook will contain many well-known examples, those examples are usually introduced in the context of a single specific topic. Exploring an example in more depth or in a different context typically requires a prohibitive amount of computation. In this talk we will present several computer-based projects designed to enhance student exploration and understanding by making examples, data, and computations more accessible to students. The projects were used as a supplement to a first-semester Abstract Algebra course. They rely on the software package GAP (Groups, Algorithms, and Programming), a freely distributed program designed to handle large computations within and relating to groups. (Received September 13, 2000)