

1023-S1-668

Nathan C. Carter* (ncarter@bentley.edu), 175 Forest St., Morison 319, Waltham, MA 02452.
Visualizing Group Theory with Group Explorer.

Group theory has powerful and underused visualization potential. The software *Group Explorer* presents the user visual information about many finite groups and homomorphisms among them, using Cayley diagrams, multiplication tables, cycle graphs, and more. A general introduction to group theory visualization will be presented, together with some example classroom uses of Group Explorer, including how it can be a powerful supplement to a traditional course. (Received September 20, 2006)