Meeting: 1003, Atlanta, Georgia, MAA CP B1, MAA Session on My Favorite Demo: Innovative Strategies for Mathematics Instructors, I

1003-B1-308　　　　**Jeffrey L. Poet*** (`poet@mwsc.edu`), Computer Science, Math, & Physcis, Missouri Western State College, 4525 Downs Drive, St. Joseph, MO 64507. *Magic Squares as an Introduction to an Abstract Algebra Course.*

I have had success in using the 3x3 magic square to introduce key concepts from a first semester undergraduate Abstract Algebra course. In addition to being a fun exercise with which to begin the course, this exercise requires students to think about appropriate mathematical justification, develops visualization skills, and serves as an introduction to the dihedral-8 group, one of the classic non-Abelian groups used as an example and counterexample for various properties throughout the course. (Received September 08, 2004)