1014-B1-108   **Christopher P Moretti*** (`cmoretti@sosu.edu`), Box 4071, Southeastern Oklahoma State University, Durant, OK 74701. *Using Mathematica to Explore Algebra and Number Theory.*

A demonstration of a Mathematica program which visually represents operations and functions in modular arithmetic. The goal of the program is to allow students in number theory, algebra, and introductory proof courses to quickly formulate their own conjectures to several of the fundamental questions in these subjects. The program and sample output can be found at http://www.sosu.edu/st/math/faculty/moretti/mma/cm-mma.html#modulardispay . (Received July 27, 2005)