1014-B1-724 David E Meel* (meel@bgnet.bgsu.edu), Dept. of Mathematics \& Statistics, Bowling Green State University, Bowling Green, OH 43403. More tools for linear algebra.
This paper presents continues the introduction of a suite of interactive web-based tools for visually exploring various linear algebra concepts (see http://www.joma.org/mathDL/4?pa=content\&sa=viewDocuments\&nodeId=560). The tools in the suite were developed using The Geometer's Sketchpad. The web-based, platform independent interactivity is accomplished through the use of JavaSketchpad, a web applet. The user needs only a Java-enabled browser. In particular, this paper presents two new tools: Matrix Multiplier and Diagonalizer that permits students to interact with both algebraic and geometric representations of concepts such as matrix multiplication, the inverse of a matrix, matrix factorization, and diagonalization. Student reactions are provided to enhance the discussion and identify the effects of utilizing such tools as part of linear algebra explorations. (Received September 23, 2005)

