1023-J1-170   **Russell D Blyth*** (`blythrd@slu.edu`), Department of Mathematics & Computer Science, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103, and **Mike May, S.J.** (`maymk@slu.edu`), Department of Mathematics & Computer Science, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103. *Pedagogy and Visualization: Two Aspects of the Use of a CAS in Linear Algebra.*

Although a computer algebra system can be used merely to replace tedious computations, its real power comes when it is used to promote conceptual understanding of (for example) linear algebra. We discuss our use of Maple worksheets that incorporate explanations and examples. We do not have as a goal that students become experts in Maple. Instead needed commands are provided in a just-in-time mode in the worksheet examples. Students copy and adapt the code to do the worksheet exercises, so the focus stays on the mathematics. Via the examples and exercises each worksheet becomes an exploratory tool that provides crucial insight into key ideas. We discuss one particularly powerful aspect, that of visualization, through several examples in linear algebra. Although our worksheets use Maple, our approach is applicable to any computer algebra system with similar capabilities. (Received August 17, 2006)