962-L1-188   **Louise M. Berard*** (`lberard@wilkes.edu`), Dept. of Mathematics and Computer Science, Wilkes University, Wilkes-Barre, PA 18766. *Spreadsheet-Based Demonstrations for College Mathematics Courses.*

Using Microsoft Excel and its macro language Visual Basic for Applications (VBA), I have developed several spreadsheets for in-class demonstrations in courses such as calculus, linear algebra, and modeling & simulation. Because VBA allows for incorporation into spreadsheets of control features such as buttons and scroll bars, these spreadsheets are easy to use, allowing instructor and students to focus on the underlying mathematics rather than on the details of spreadsheet manipulation. As an instructor, I value Excel for creating in-class demonstrations because of its wide availability as well as its powerful development tools. From the perspective of my students, because many of them now have prior experience with spreadsheets from other courses, they seem comfortable with the Excel environment. On the other hand, because students tend to associate spreadsheets with financial applications, they often are surprised to see them used to explore theoretical concepts in mathematics. Students at a variety of levels seem to respond favorably to seeing a familiar tool used in unexpected ways. (Received August 24, 2000)