1014-B1-186   **Douglas B Meade*** (`meade@math.sc.edu`), Department of Mathematics, University of South Carolina, Columbia, SC 29208, and **Philip B Yasskin** (`yasskin@math.tamu.edu`), Department of Mathematics, Texas A & M University, 3368 TAMU, College Station, TX 77843-3368. *Maplets for Calculus.*

Maplets for Calculus is a collection of Maple applets designed to help students practice their calculus problem-solving skills and to assist instructors in providing effective classroom demonstrations (including graphics). The maplets cover all major topics in single-variable calculus - limits, derivatives, integrals, differential equations, sequences, series, and polar coordinates. Some of the maplets help to build intuition and some provide practice with routine computational techniques. A Table of Contents and sample videos may be seen at

`http://calclab.math.tamu.edu/maple/Maplets/Contents.html`

Most of the maplets support both algorithmically-generated (random) problems as well as user-entered problems. This allows students to enter a specific problem (from a textbook), or use the maplet for drill practice in preparation for a quiz or exam.

The maplets in this collection are designed to be highly pedagogical. Most of the `Student[Calculus1]` maplets that come with Maple are calculators - you tell the maplet something you want to visualize or compute and the maplet shows or computes the requested object. By contrast, the Maplets for Calculus maplets ask the student a question and guides the student through the solution process. (Received August 11, 2005)