962-C1-521

Teri J. Murphy (tjmurphy@math.ou.edu), Department of Mathematics, 601 Elm Ave, University of Oklahoma, Norman, OK, Darren A. Narayan\* (dansma@rit.edu), Department of Mathematics and Statistics, 85 Lomb Memorial Dr, Rochester Institute of Technology, Rochester, NY 14623, and David Streid (dstreid@mum.edu), Department of Mathematics, Maharishi University of Management, Fairfield, IA 52557. Animation of Areas and Tangent Lines using Java Applets.

As part of a NSF Workshop on Mathematical Java at Emporia State University we have constructed web based computer programs called applets designed to provide insight in the learning of topics in first semester calculus. These applets are designed to enhance student learning of differentiation and integration through the use of graphical animation. In addition, they allow the student to interact by entering information so a student can both learn and reinforce calculus concepts through inquiry based learning and self discovery. (Received September 15, 2000)