1035-Z1-709   **Brad Bailey*** (`bbailey@ngcsu.edu`), 66 Nimblecrest Way, Dahlonega, GA 30533. *Animations Easily Generated and Adapted For Use in Pre-Calculus through Calculus III.*

We use Maple to create a variety of computer animations designed to demonstrate a broad range of mathematical concepts. These concepts occur in courses such as Pre-Calculus, Calculus and Statistics. Examples of such concepts include the Horizontal and Vertical Line Tests, how a function's graph is related to the graph of its inverse function, how to plot a polar equation, how the tangent line to a graph relates to the secant lines and how the standard deviation of a normal distribution effects the graph of the distribution function. This talk also includes several examples of three-dimensional animations for use in a vector calculus course. Each of these demonstrations can be quickly and easily altered to use another function or a variety of functions. (Received September 14, 2007)

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