

1077-E1-707

Martin E Flashman* (flashman@humboldt.edu), Department of Mathematics, Humboldt State University, Arcata, CA 95521. *Newton Estimates the Natural Logarithm of 2: A History Lesson for Calculus II*. Preliminary report.

The second semester of a calculus course has many mathematical themes including transcendental functions, estimation, integration, and infinite series. The author will illustrate the power of using original sources to show the interrelated nature of these themes with Isaac Newton's 16 decimal place estimate for the natural logarithm of 2 which appeared in "The method of fluxions and infinite series" [1671/1736]. (Received September 10, 2011)