

Meeting: 1003, Atlanta, Georgia, MAA CP R1, MAA Session on My Three Favorite Original Calculus Problems

1003-R1-479 **Ron Buckmire*** (ron@oxy.edu), 1600 Campus Road, Mathematics Department, Los Angeles, CA 90041. *My Three Favorite Original Calculus Problems.*

My three favorite Calculus problems involve three very different kinds of mathematical understanding and are designed towards three particular learning styles: graphical/visual, symbolic/functional and verbal/written. The first involves connecting information about concavity and slope of a curve to the approximation error involved in numerical integration techniques. The second tests the student's understanding of integration by parts and integration by substitution together with the abstract definition of function. The third requires the student to examine and think about the language used to describe the evaluation of indeterminate limits. (Received September 16, 2004)