

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

1003-R1-1534      **J. D. Phillips\*** ([phillipj@wabash.edu](mailto:phillipj@wabash.edu)), Department of Mathematics and Computer Sc.,  
Crawfordsville, IN 47933. *Self-interest and mean values: three problems.*

I present three original calculus problems: (1) an invitation for students to define a function; they should be motivated out of genuine self-interest, (2) a “deus ex machina” appearance of the mean value theorem, and (3) a nifty application of the mean value theorem for definite integrals. (Received October 05, 2004)