

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

1003-R1-1083      **Timothy J. Pennings\*** (pennings@hope.edu), Department of Mathematics, Hope College,  
Holland, MI 49423. *Standard Problems with a Twist.*

Semi-twisted versions of standard calculus problems are presented. In particular 1) longest length board from hallway of width A to hallway of width B (very pretty answer), 2) a conservative vector field problem that requires finding a different path, 3) a nice little infinite sum, 4) a problem of finding the optimal speed of a boat when going against a current, and 5) an arc length problem. All require a bit more ingenuity than standard problems, yet are simple enough to be used as homework or challenging test problems. (Received October 03, 2004)