
Problem of the Week — September 5, 2015

Welcome back problem solvers! I'm hoping your semester is off to a wonderful start. This week's problem requires nothing more than simple calculus, so if you are a calculus student, please give it a try. Like last year, the student who submits the first correct and thoroughly-written solution will receive a \$15 gift card to the Kenyon bookstore. More importantly, you will have earned undeniable bragging rights.

PROBLEM: A Kenyon math professor decides to run the trails of the Brown Family Environmental Center to prepare for her half marathon. She is quite a fast runner, and she ran a six mile course through the BFEC trails in exactly 30 minutes. Prove that there must be a one-mile stretch of the course which she ran in exactly five minutes. Naturally, you must write up your solution rigorously, using sound mathematics.

Solutions accepted until 4 pm 9/14/15

You must submit complete solutions to Brian Jones (Hayes 303) either via email or hard copy; however, if you submit a hard copy, it must have a time-stamp (i.e. either electronic proof of time printed or a faculty signature verifying the time submitted.)