

MATH PROBLEMS OF THE MONTH

NOVEMBER 2009

Easier Problem. Is it easier (more likely) for one to flip two coins and get at least one heads or to flip four coins and get at least two heads? Why?

Harder Problem. If f is any polynomial, then prove that there exist two other polynomials p and q whose graphs are both increasing functions on the entire real line and such that $f = p - q$.

Find the problems at math.wlu.edu

The first problem is worth \$1. There will be 5 student awards and 5 faculty/staff awards given. The second problem is worth \$5 and 2 student awards and 2 faculty/staff awards will be given. The first ones to submit correct solutions - not just correct answers, but correct answers with correct explanations - win prizes. If you solve the unsolved problem...then we'll recommend you for a PhD (and we'll write a paper together!).

Submit your solutions to Professor Feldman by either placing them in his mailbox or taking it to his office (Robinson Hall 31).