MATH CHALLENGE PROBLEM

for late November 2015

Bertrand's Three Coins

Your friend Bertrand has three quarters. One is a regular quarter, but the other two are double sided: one has two heads, the other has two tails. He promises to give you all three coins if you can correctly call a coin he flips. He reaches into his pocket and grabs one of the quarters at random, and without looking, flips it into the air. You call "tails." It lands heads.

Feeling sorry for you, he offers you another chance. You can choose to flip the coin over and reveal the other side, or he can flip one of the remaining coins (chosen at random) and see how it lands. You win if the result of your choice is tails. Which is the better choice?

The Challenge: Which is more likely: that the other side of the first coin is a tails, or that a randomly chosen coin from the remaining two will flip to tails? And why are they not equally likely?

Submit solutions to Ross 2239G or `oscar.levin@unco.edu` by **Friday, December 4**.

The best solution WIN A PRIZE!
Prizes include nifty Rubik's style puzzle cubes, math puzzle books, math games, even a math coloring book. So submit your answer TODAY!