## Monthly Math Contest: Three heads in a row

September 2014

Suppose you play a game where you repeatedly flip a coin until you get three heads in a row, at which point you lose and the game ends. What is the probability that you will lose the game on the 10th flip?

Challenge problem: Find some kind of general formula or procedure for computing the probability p(n) that you will lose the game on the *n*th flip.

Solutions may be submitted by email to rmehtaQsmith.edu or placed inside the "Monthly Math Contest" folder outside 310 Burton. Solutions are due by 5pm on the last weekday of the month.