

Department of Mathematics and Computer Science
Probability and Statistics Challenge Problems 15

Please submit solutions by Wednesday February 24, at 3pm

Three people play the following game. Each player flips a coin until the outcome (heads or tails) for one of the players is not the same as for the other two players. This player loses the game. Suppose one of the players attempts to reduce his chances of losing by using a two-headed coin (heads on both sides). If the other two players are using fair coins, will this strategy successfully reduce his chances of losing the game?

Solutions to any or all of the problems may be submitted to John Sheriff (D510). If no one is in the office, just put the solution under the door. Please include your name and student number. Students with correct solutions will be acknowledged and prizes will be awarded at the end of the year based upon performance during the year. Problems and solutions are available at <http://www.cs.uleth.ca/~sheriff/statistics/challenge.htm>.