

Department of Mathematics and Computer Science
Probability and Statistics Challenge Problems 13

Please submit solutions by Wednesday February 3, at 3pm

A bag contains 144 ping-pong balls. More than half of the balls are painted orange and the rest are painted blue. Two balls are simultaneously drawn at random. The probability of drawing two balls of the same colour is the same as the probability of drawing two balls of different colours. How many orange balls are in the bag?

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>.