

Department of Mathematics and Computer Science  
Probability and Statistics Challenge Problems 2

*Please submit solutions by Wednesday October 14, at 3pm*

You are given three envelopes. One envelope contains two \$100 bills, one envelope contains two \$5 dollar bills and one envelope contains a \$100 bill and a \$5 bill. You randomly select an envelope and randomly select one of the bills from the envelope. If you choose a \$100 bill, what is the probability that the remaining bill in the envelope is also a \$100 bill?

*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>.*