

## Department of Mathematics and Computer Science

### Probability and Statistics Challenge Problems 16

*Please submit solutions by Wednesday March 3, at 3pm*

You are a member of a class of 18 students. A bowl contains 18 chips: 1 blue and 17 red. Each student is to take 1 chip from the bowl without replacement. The student who draws the blue chip is guaranteed an A for the course.

1. If you have a choice of drawing first, fifth, or last, which position would you choose? Can you justify your answer using probability?
2. Suppose the bowl contains 2 blue and 16 red chips. What position would you now choose?

*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>.*