

## Problem of the Week #19

Assigned: 25 February 2011, 1300

Due: 03 March 2011, 1300

Fermat's Room

You have three boxes: one contains blue marbles, one red marbles, and one a mixture of red and blue marbles. The boxes are labeled with "Red", "Blue" and "Mixture", but, unfortunately, they are all mislabeled.

You can draw any number of marbles out of whichever boxes you like. What is the minimum possible number of draws that will enable you to correctly label the three boxes?

Email solutions to [Christopher.marks@usma.edu](mailto:Christopher.marks@usma.edu) with subject line: POTW.

Solutions can be emailed in the form of: an email (plain text) no attachment, a word document, a mathematica file, an excel workbook, or a scanned adobe file of your work.

If none of these options work for you, you may drop a hardcopy off at my office TH239C, just annotate the time of submission.