## Pi Mu Epsilon Problem of the Month <br> August 2016

Twenty-five rings are placed in an urn, five each of the following colors: blue, yellow, black, green, and red. Suppose you choose five rings by drawing the first two from the urn without replacement, and the last three with replacement.

> Put forward an Olympian effort to find the probability that the five rings you draw in this way are all different colors.

Problem of the Month Rules:
H Submissions must include a complete mathematical justification along with the answer.
H Submissions may only be made by individuals or groups of two and must be dated.
$\mathscr{H}$ Due date: August 29, 2016 before 5 p.m.; they may be given to Dr. Phillip Poplin or Dr. David Shoenthal.
To get your own copy, please visit: http://www.longwood.edu/mathematics/problemofthemonth.htm

