



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #10
(Fall 2016)

In my new favorite game, I roll n fair 6-sided dice, and I win if every number from 1 to 6 comes up at least once. What is the smallest value of n for which I'm more likely to win than to lose?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, November 23, 2016.

Every week, the best solution submitted earns a \$10 Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck!

You can always see the Problem of the Week (and complete rules) online at:

<http://www.uwplatt.edu/mathematics/problem-week>