



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #5
(Fall 2019)

You are about to play a game. You will roll an even number of fair 20-sided dice (with their faces numbered from 1 to 20 as usual), and you win a prize if more than half of them come up showing single-digit numbers. If you get to choose, how many dice should you roll?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, October 23, 2019.

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://uwpmath.weebly.com/>