



PROBLEM OF THE WEEK #6
(Spring 2019)

The decimal form of the integer N consists of 2019 nines in a row: $N = \underbrace{999\dots999}_{2019}$.

How many nines occur in the decimal form of N^3 ?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, March 6, 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/>