



PROBLEM OF THE WEEK #3
(Fall 2017)

The digits 0, 1, 2, . . . , 9 (one copy of each) have fallen out of the number

$$x = 5_383_8_2_936_5_8_203_9_3_76$$

Based on this information, what is the probability that x is divisible by 396?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, October 4, 2017.

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/>