



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #4
(Fall 2016)

Let x_1, x_2, \dots, x_n be equally spaced points on the unit circle. What do you get if you multiply together the distances from x_1 to the other $n - 1$ points?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, October 12, 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>