



UNIVERSITY OF WISCONSIN  
**PLATTEVILLE**  
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #7  
(Fall 2021)

An eccentric mathematician gives you 25 pennies, and invites you to divide them into piles. Once you do, she will count the pennies in each pile, multiply together all of the pile sizes, and pay you a number of pennies equal to the product. What is the largest payout you can earn?

[Please fully explain your answer.]

Email solutions to [kwonmi@uwplatt.edu](mailto:kwonmi@uwplatt.edu) by 2:00pm on Wednesday, November 3, 2021.

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/>