



UNIVERSITY OF WISCONSIN  
**PLATTEVILLE**  
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #5  
(Spring 2023)

Find every positive integer that equals four times the sum of its digits.

[Please fully explain your answer.]

Email solutions to [kwonmi@uwplatt.edu](mailto:kwonmi@uwplatt.edu) by 2:00pm on Wednesday, March 1, 2023.

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/>