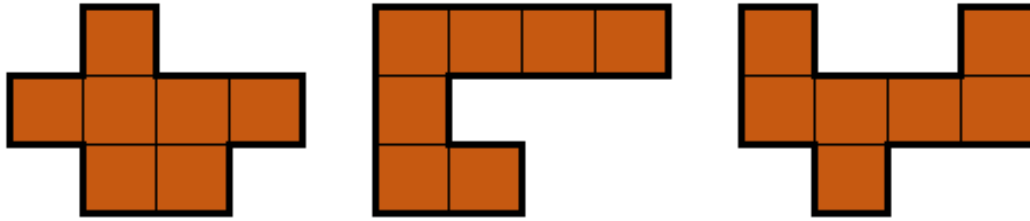




PROBLEM OF THE WEEK #8  
(Fall 2022)

A **glob** is a polygon like a Tetris piece, but made out of 7 squares instead of four. Three example globs are shown in the figure below: each comprises 7 squares of the same size, attached edge-to-edge to form a single polygon.



It is known that there are exactly 108 different globs. Is it possible to tile a  $28 \times 27$  rectangle using each glob exactly once?

[Please fully explain your answer.]

Email solutions to [kwonmi@uwplatt.edu](mailto:kwonmi@uwplatt.edu) by 4:00pm on Wednesday, November 9, 2022.

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/>