



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #2
(Fall 2018)

This weekend I went to a 20-team round robin Quidditch tournament, which means that each team played every other team exactly once.

At the end of the tournament, each team's number of wins was a perfect square, and at least as many teams finished with 16 wins as with 9 wins. There were no ties.

Exactly how many teams ended up with 16 wins?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, September 26, 2018.

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/>