PROBLEM OF THE WEEK #10
(Fall 2018)

Find a rational number y for which $\sqrt{y^2 - 5}$ and $\sqrt{y^2 + 5}$ are both rational.

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, November 21, 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/`