



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #2
(Fall 2016)

Find integers x and y such that

$$\begin{cases} x^2 - 16x + 3y = 20, \\ y^2 + 4y - x = -12. \end{cases}$$

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, September 28, 2016.

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://www.uwplatt.edu/mathematics/problem-week>