



PROBLEM OF THE WEEK #6
(Fall 2018)

This problem involves chess: to learn how pieces move, see <https://tinyurl.com/yam2tu9l>. Place a knight or a bishop in each of the 16 spaces so that every row and column contains two knights and two bishops. The number in each space is the number of pieces of the same type that the piece in that space can attack. For example: a space marked with a 4 contains either a knight that can attack exactly 4 other knights from its current location or a bishop that can attack exactly 4 other bishops. [When computing this number, assume that pieces do not block bishops' attacks.]

2	2	1	2
1	3	2	2
2	3	3	2
1	1	3	2

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, October 24, 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/>