

PROBLEM OF THE WEEK #6 (Fall 2018)

This problem involves chess: to learn how pieces move, see https://tinyurl.com/yam2tu91. 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.]

	E 2	Ð1	
	£) 3		Ð2
Ð2	€ 3	€ 3	Ð2
\mathfrak{D}_1		Ð 3	

Solution:

The problem we meant to ask, and its solution, are shown above. Regrettably, there was a typo in the problem when we first distributed it. How embarrassing! Sorry.... The typo was not present in the original source, cited below.

Source:

[Nac18] David Nacin, Knights and bishops, MAA FOCUS (August 2018), 32.