

Add: problem 2c.

- The other Jennifer says that if a number is a multiple of 10 and a multiple of 12, it must be a multiple of 120. What say you?

n is prime

$$k(n) = 2n - 1$$

$$k(p) = 2p - 1$$

n rows and columns

$$n = 5$$

4	0				
3	0				
2	0				
1	0				
0	0	0	0	0	0
	0	1	2	3	4

5? No!

$$n = 12 \quad k(n) = 40$$

$$40 = \text{stuff?}$$

$$= 5 \cdot 8$$

$$= k(3) \cdot k(4)$$

$$\neq k(2) \cdot k(6)$$

"mod 6"

5	0	5	4	3	2	1
4	0	4	2	0	4	2
3	0	3	0	3	0	3
2	0	2	4	0	2	4
1	0	1	2	3	4	5
0	0	0	0	0	0	0
x	0	1	2	3	4	5

+5 = -1

$$\begin{array}{r} 6 = 0 \\ -1 \quad -1 \\ \hline 5 = -1 \end{array}$$

$$xy = 0 \pmod{6}$$

15 answers!

$$xy = 1 \pmod{6}$$

2 answers