16
9
4
1
1   2   3   (4)

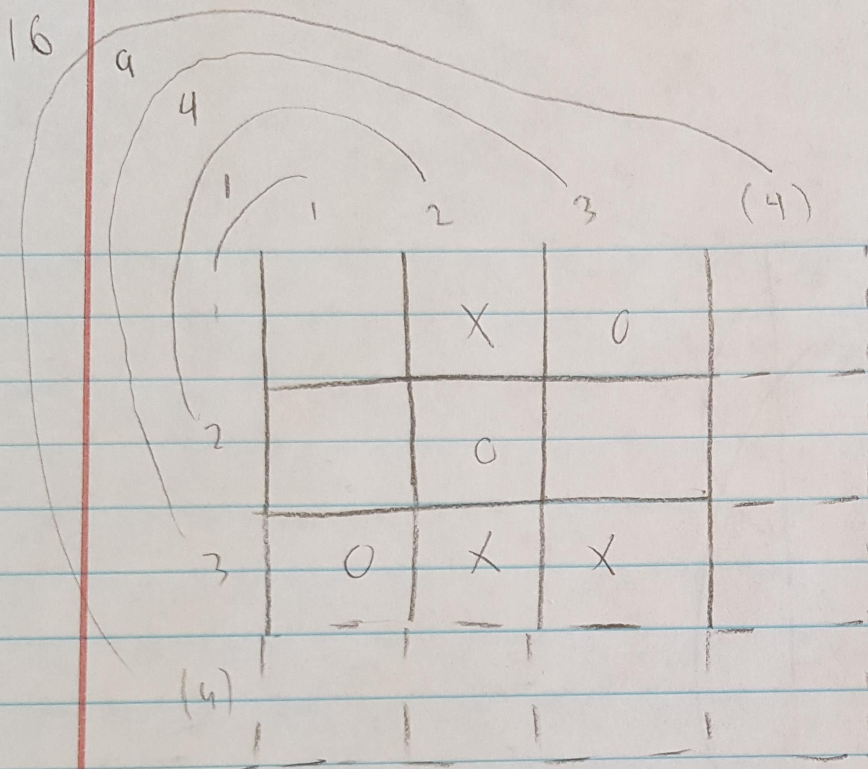|	1	2	3	(4)
		X	0	
2		0		
3	0	X	X	
(4)				

Since this is a game of tic tac toe, the grid must always be a square. That means the runtime complexity is $O(n^2)$.

Sidenote: If the grid only expands one way (either width or height), then the complexity space wise would be linear. $O(N)$.