



Explanation Tic Tac Toe Sudoku.

This Sudoku variant is based on the Tic Tac Toe game.

Explanation:

This Sudoku consists of 64 (8 by 8) positions.

Each position has to be filled with three crosses.

There are 8 different variants; three horizontal and three vertical rows and two diagonals.

In a row it looks like:

X			X	X	X	X				X			X				X					
	X					X				X			X	X	X	X	X	X				
		X				X		X				X					X		X	X	X	

Each variant can appear once in a row, column and Block (four columns and two rows). This is in accordance with the Sudoku rules.

The solution of a puzzle looks like this:

X			X	X	X	X				X			X				X					
	X					X				X			X	X	X	X	X	X				
		X				X		X				X				X	X	X	X	X		
						X	X	X		X			X	X	X	X	X	X	X	X		
X	X	X				X	X	X	X			X				X					X	
X						X				X	X	X	X	X	X	X	X	X	X	X		X
X			X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		X
		X				X	X			X	X	X	X	X	X	X	X	X	X	X		X
	X					X	X			X					X	X	X	X	X			X
	X					X	X			X					X	X	X	X	X			X
X	X	X	X							X	X	X	X	X	X	X	X	X	X		X	X
						X	X	X	X						X	X	X	X	X			X
						X	X	X	X						X	X	X	X	X			X
						X	X	X	X						X	X	X	X	X			X
						X	X	X	X						X	X	X	X	X			X



In addition to the solution methods of a traditional Sudoku there are the following, additional, methods to solve the puzzle:

X			X	X	X	X				X			X				X			
	X					X			X			X	X	X	X		X			
		X				X		X				X				X	X	X	X	

On each of the 64 positions a cross can be placed in a sub-position. At each position tree crosses must be filled in.

If two sub-positions are filled with crosses the solution can be found immediately:

For example (Red is the solution, black was already filled):

X			X	X	X	X		
	X					X		
		X				X		

Per row, column and block are $3 * 8 = 24$ crosses present in the solution. The number of possible crosses varies for each sub-position, and looks like this:

3	2	3
2	4	2
3	2	3

On sub-positions where only two crosses can occur the solution can be found on the most easy way, for example (considered a row):

X	X	X		X	

Then the solution is, marked in red:

				X	
				X	
X	X	X		X	



At sub-positions with three possible crosses:

X		
	X	
		X

X	X	X

X		

The Solution is (marked in red):

X		
	X	
		X

X	X	X

X		
X		
X		

In the sub-positions, in the middle, with four possible crosses:

X	X	X

	X	
	X	
	X	

X		
	X	
		X

	X	

The Solution is (marked in red):

X	X	X

	X	
	X	
	X	

X		
	X	
		X

		X
	X	
X		

Tip to solve the puzzle:

Highlight the possible sub-positions with a dot, for example:

X	X	X

	X	
	X	
	X	

•		•
	X	
•		•



Sudoku Plaza

The complete puzzle looks like:

			X	X								
				X		X	X					
					X					X		
						X					X	
X												
X				X		X					X	
X						X						X
						X						
				X				X				
								X	X	X		
				X								
X						X			X			X
						X						
	X							X	X	X		
				X	X							
	X	X		X			X					X
				X			X			X		
	X			X		X			X			
X								X				X
				X	X							
											X	

Good luck!