

## **Explanation Tic Tac Toe Sudoku.**

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

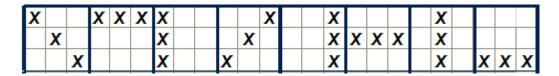
## Explanation:

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

Each position has to be filled with three crosses.

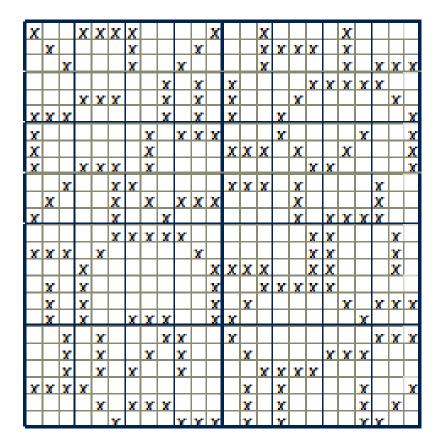
There are 8 different variants; three horizontal and three vertical rows and two diagonals.

In a row it looks like:



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:



Publication from this Sudoku is only permitted with indication of source.



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		Χ				X			
	X					χ			X			X	Х	X	X	X			
		X				X		X				X				X	X	X	X

On each of the 64 positions a cross can be places in a sub-positions. 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

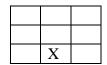
X	
X	
X	

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):





Then the solution is, marked in red:

X	X	X





At sub-positions with three possible crosses:

X		
	X	
		X

X	X	X

X	

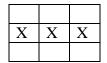
The Solution is (marked in red):

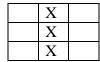
,	X		
		X	
			X

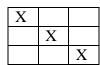
X	X	X

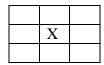


In the sub-positions, in the middle, with four possible crosses:

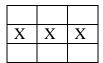








The Solution is (marked in red):



	X	
	X	
	X	

X		
	X	
		X



Tip to solve the puzzle:

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

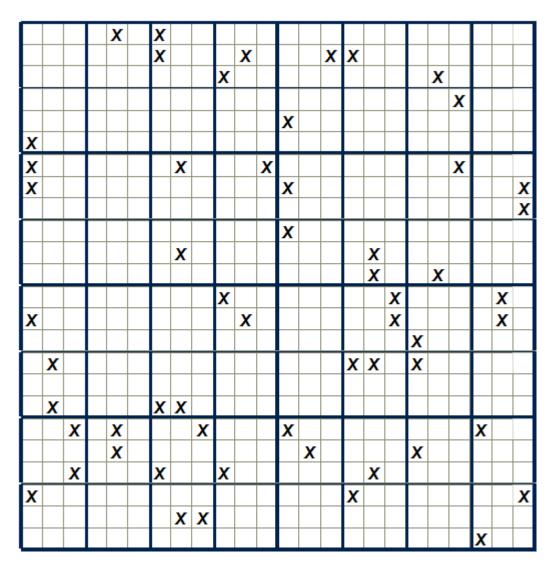
X	X	X

	X	
	X	
	X	

•		•
	X	
•		•



The complete puzzle looks like:



Good luck!