FUTOSHIKI

This Japanese cousin to Sudoku is based on a simplified sudoku grid. As in the original puzzle each line, across and down is to have each of the numbers 1 to 5 (or whatever the size of the square is) appearing just once each. But here there are no blocks of squares that must obey the rules as well. So the result will be what is called a Latin Square.

4	E	2	2	Л
	Э	3		4
4	1	2	3	5
2	3	4	5	1
3	4	5	1	2
5	2	1	4	3

Tips for Solving Futoshiki

The only clues you have are the given numbers and the symbols $(\sim V^{\Lambda})$ which tell you if the number in the square is larger (>) or smaller (<) than the number next to it.

Solving Tips:

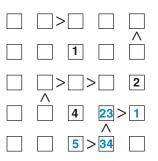
Look for chains of signs that give extended information and so reduce the possibilities for one or more squares.

The square below the 4 in column three is larger than the one on it's right which is larger than the one above it, which is larger than the one on its right. In other words: it can only be a 4 or a 5. It can't be a 4 – that column already has one - so it must be the 5. So the cell next to it can only be a 4 or a 3, the one above that a 3 or a 2 and the one on its right a 2 or a 1. But it cannot be a 2 as column five already has a 2. So it must be a 1.

In column 3 we now have 1, 4 and 5, leaving us to place 2 and 3. Crosschecking with the rows, the 2 cannot go in the third row so must go at the top and a 3 is placed in the centre. That 3 is larger than the number in the square to its right, which must therefore be a 1. The square to the left of the 3 is bigger than 3 (ie 4 or 5) but in its turn it is smaller than the number below it. So left of the

3 is a 4 and below that a 5. Row three is completed with the remaining number: a 5.

To the left of the 2 at the top of the grid is a larger number but the only one available in column two is a 3. There cannot be a 1 below (row two already has a 1) so it is a 2 and the 1 goes at the bottom of column 2. The number in the bottom right corner cannot be a 2 so the 2 must go in the bottom-left corner. The square above it must be a 3 and in row four the last figure to go in is the 2.



 Column one is easily completed with 1 at the top and 4 below it. In row one, the right-hand end cannot be a 5 as it is smaller than the number below it. So it is a 4 with a five on its left and row one is complete. This in turn gives us column five – a 5 below the 4 and a 3 at the bottom, which in turn decides column four and the puzzle is solved.

3	>2		
2	1		
4	>3>	> 1	2
5	4	2	> 1
1	5	> 34	\square
<u> </u>		<u> </u>	
3>		5	4
			4 ^ 5
3>	>2	5	\wedge
3>	>2	5 3 > 1	∧ 5 2
	2 4 5	4 > 3 > ^ 5 4	2 1 4>3>1 ^ 5 4 2: ^