

Lesson 1

Welcome to Sudoku OTW. These lessons are designed to get you up and running – and enjoying – the game of Sudoku quickly and easily. Note that these lessons are designed to be viewed in order, as one lesson often builds on the skills covered by previous lessons.

The first step in solving Sudoku puzzles is to make sure that you understand the basic rules of Sudoku. These rules are not complicated, and are covered in the Sudoku Rules section of this help.

Terms and Numbering

Before we go any further, let's define some terms and common ways of referring to our puzzle for this and future lessons. The key elements of Sudoku are:

Square – The place where you put a number. There are 81 of these in the puzzle, laid out in a 9 x 9 grid.

Row – A horizontal collection of 9 adjacent squares.

Column – A vertical collection of 9 adjacent squares.

Box – A collection of 9 squares in a 3 x 3 grid. There are 9 boxes in each Sudoku puzzle, also laid out in a 3 x 3 grid, as shown in the diagram below.

Using this diagram as a reference, we can refer to a specific cell within the puzzle by its letter-number pair.

	A	B	C	D	E	F	G	H	I
1									
2		1			2			3	
3									
4									
5		4			5			6	
6									
7									
8		7			8			9	
9									

For example, G2 is the second row in column G. We'll also number the boxes on the puzzle 1-9 as shown (remember these box numbers, as it's too confusing to display them on example boards). This notation will allow us to be specific and clear as we go

through different puzzle-solving strategies.

Only Space Left

Remember that all columns, rows, and boxes must contain all numbers 1-9. So a good first rule to remember in solving Sudoku puzzles is to keep your eye open for times when all of the squares in a row, column, or box are filled in except one. The green square (C5) in the diagram illustrates one such situation. You can see that the only number not present in column C is 9, so that *must* be the value for C5. These situations may happen at the beginning of a puzzle, and occur often as you move toward the end of the puzzle.

	A	B	C	D	E	F	G	H	I
1	5		7	1	3				
2		2	4					3	6
3			8			5			
4			6		7	2	1		3
5									
6	7	1	2						
7		8	5						
8			3			6	4		
9			1				7	2	

Only Space Left Part 2

A good next move is to look for situations like the yellow boxes in the same diagram. Boxes 1, 2, and 3 are shared between rows 1, 2, and 3. Looking at row 2, the number 5 cannot appear in the squares in 2A, 2B, or 2C (because there's already a 5 in that box at A1). Likewise, 5 can't be in D2, E2, or F2 because box 2 already has a 5 at F3. So the 5 in row 2 (it must have one somewhere in it) must be in G2, H2, or I2. Because H2 and I2 already have numbers in them, the 5 *must* go in G2.

A similar situation occurs with boxes 3, 6, and 9 on the right-hand side. Boxes 3 and 6 already have the number 3 in them, so column G's number 3 must be in box 9. The only square available in column G of box 9 is G7. So the 3 *must* be in G7.

The next lesson covers **Only Space Left Part 3**.