

# **Sudoku Tips & Guides**

**as described by Neil Pomerleau on [sudokusource.mabuhaynet.com](http://sudokusource.mabuhaynet.com)**

## **Introduction to Sudoku**

Contrary to what many people believe, Sudoku didn't actually originate in Japan. The game was first published in the U.S. in 1979 under the name of Number Place. Sudoku became popular in Japan in 1986 under the name of Sudoku, and it has just started to actually become popular in the U.S. in 2005 with the new Japanese name. Sudoku is the abbreviation of a Japanese phrase that means "the digits must remain single."

While some variations exist, a Sudoku puzzle is usually a 9×9 grid, made up of 3×3 subgrids, or "regions". Some cells already contain numbers. These numbers are known as "givens". As mentioned, the goal of Sudoku is to fill in the grid so that every row, every column, and every 3x3 box contains the digits 1 through 9. The numbers in Sudoku puzzles are only customary because no mathematics are involved with Sudoku, only logic. Any set of nine different symbols may be used in place of the digits 1 through 9, such as letters, shapes, or colors, but Sudoku puzzles rarely use such symbols.

Every Sudoku puzzle is designed so that there is only one solution. Obviously, it is against the rules to alter the "given" numbers, so it is necessary to work around those numbers. With any Sudoku-solving method or methods, you will learn that it is always incredibly easy to make a mistake. Once one mistake is made, a snowball effect of errors occurs, and you usually won't notice the mistake until so many mistakes have been made that you would either have to start over again or find a way to take out your frustration in some way. Visit the "If You're Frustrated" page for some guidance in these situations.

The guides, tips, and methods featured on this site come in three different sizes: Easy, Moderate, and Advanced. The easy methods are obviously easier and take less time to learn, but they are sometimes tedious and less effective. Consequently, the advanced methods are obviously more difficult and take longer to learn, but they are some quicker to use and more effective, if not necessary in some situations. The moderate methods are, well...moderate. The methods I will show may be applied at any point of solving a Sudoku puzzle when necessary. It's impossible for me to show you every situation that the various methods can be used in, so it is up to you to learn how to apply the various methods effectively.

If you're just starting to learn about Sudoku, I recommend that you read the Easy Tips & Guides pages. If those methods prove to be too easy or you master those techniques, feel free to move on to the Moderate Tips & Guides or Advanced Tips & Guides.





3. Look at the 3x3 block in the upper left corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas, and it obviously can't go in the box where the "2" is. This only leaves the square that is highlighted green.

								<b>1</b>
				<b>1</b>				
<b>2</b>								
		<b>1</b>						

### Easy Tips & Guides- Method 3

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

								<b>1</b>
				<b>1</b>				
		<b>1</b>						
<b>1</b>								

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### Step-by-Step Explanation:

1. Look at where the first two "1"s are located. You can't place a "1" in the first row because there is already a "1" in that row. In addition, you can't place a "1" in the second row for the same reason. The first two rows are darkened because a "1" can't go in either row.

								<b>1</b>
				<b>1</b>				
		<b>1</b>						
<b>1</b>								

2. Look at where the last two "1"s are located. You can't place a "1" in the first column because there is already a "1" in that column. In addition, you can't place a "1" in the second column for the same reason. Those two columns are darkened because a "1" can't go in either column.

								<b>1</b>
				<b>1</b>				
		<b>1</b>						
<b>1</b>								

3. Look at the 3x3 block in the upper left corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas. This only leaves the square that is highlighted green.

								<b>1</b>
					<b>1</b>			

### Easy Tips & Guides- Method 4

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

<b>2</b>	<b>3</b>							
			<b>1</b>					
<b>4</b>								
	<b>1</b>							

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### Step-by-Step Explanation:

1. Look at where the first "1" is located. You can't place a "1" in that row because there is already a "1" in that row. The first row is darkened because a "1" can't go in that row.

2	3					
			1			
4						
	1					

2. Look at where the second "1" is located. You can't place a "1" in that column because there is already a "1" in that column. That column is darkened because a "1" can't go in that column.

2	3					
			1			
4						
	1					

3. Look at the 3x3 block in the upper left corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas, and it obviously can't go in the boxes where the "2," "3" and "4" are. This only leaves the square that is highlighted green.

2	3					
			1			
4						
	1					

## Easy Tips & Guides- Method 5

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

	2	3	4	5	6	7	8	9

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### Step-by-Step Explanation:

1. Look at the first row. Each row can only contain the digits 1 through 9 once because of the rules. The first row already has every digit but "1," so the remaining box in the first row must be "1."

	2	3	4	5	6	7	8	9

## Moderate Tips & Guides- Method 1

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

	2	3						1
	4	5	2	6				
1								

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### Step-by-Step Explanation:

1. Look at where each "1" is located. You can't place a "1" in the first row because there is already a "1" in that row. In addition, you can't place a "1" in the first column for the same reason. The first row and the first column are darkened because a "1" can't go in either row or column.

	2	3						1
	4	5	2	6				
1								

2. Look at the 3x3 block in the upper left corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas, and it obviously can't go in the boxes where the "2," "3," "4" and "5" are. This only leaves the two squares that are highlighted yellow.

	2	3						1
	4	5	2	6				
1								

3. Look at the row of the two yellow highlighted squares. Since we know that one of these is a "1," a "1" can't be in any other part of that row. The first row is darkened because a "1" can't go in that row.

	2	3						1
	4	5	2	6				
1								

4. Look at the 3x3 block in the upper middle side. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas, and it obviously can't go in the boxes where the "2" and the "6" are. This only leaves the square that is highlighted green.

	2	3						1
	4	5	2	6				
1								

### Moderate Tips & Guides- Method 2

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

1								
			2	3	4	5	6	

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### Step-by-Step Explanation:

1. Look at where the "1" is located. You can't place a "1" in the first row because there is already a "1" in that row. The first row is darkened because a "1" can't go in either row or column.

1								
			2	3	4	5	6	





3. Look at the first row that has the three yellow highlighted squares. Since we know that one of these is a "1," a "1" can't be in any other part of that row. In addition, the second row can't have any additional "1"s because there is already a "1" in that row, and the column that is 3 spaces from the right can't have any additional "1"s because there is already a "1" in that column. Those rows and columns are darkened because a "1" can't go in those rows and columns.

2	3			1				
4	5						6	
							1	
		1						

4. Look at the 3x3 block in the upper right corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas, and it obviously can't go in the boxes where the "6" is. This only leaves the square that is highlighted green.

2	3			1				
4	5						6	
							1	
		1						

### Moderate Tips & Guides- Method 4

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" and another number on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position of the "1" will be revealed, and the correct position of the other number will be highlighted in green.

		2	3	4	5	6	7	8
	1							



## Moderate Tips & Guides- Method 5

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

			2	3	4	5	6	7
8								
9								

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### Step-by-Step Explanation:

1. Look at the first row. Each row can only contain the digits 1 through 9 once because of the rules. The first row already has every digit but "1," "8" and "9," so the remaining boxes in the first row, highlighted in yellow, must be "1," "8" and "9."

			2	3	4	5	6	7
8								
9								

2. Look at the first column. There can't be any additional "8"s or "9"s in that column because there is already an "8" and a "9" in that column. The first column is darkened because "8" or a "9" can't go in that column. The yellow highlighted boxes must be "8" and "9" because those are the only places that "8" and "9" can still go in.

			2	3	4	5	6	7
8								
9								

3. Look at the first row again. Each row can only contain the digits 1 through 9 once because of the rules. Since we know that the yellow highlighted boxes are "8" and "9," the first row already has every digit but "1," so the remaining box in the first row must be "1." The box that the "1" has to be in is highlighted green.

			2	3	4	5	6	7
8								
9								

### Advanced Tips & Guides- Method 1

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

			2	3			1
4							
	5	1					
2							
3							

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#### Step-by-Step Explanation:

1. Look at the first row and the first column. You can't place a "2" or a "3" in the first row or the first column because there is already a "2" and a "3" in both the first row and the first column. The first row and the first column are darkened because a "2" or a "3" can't go in either the first row or the first column.

				2	3			1
	4							
		5	1					
2								
3								

2. Look at the 3x3 block in the upper left corner. A "2" and a "3" have to go somewhere in this box because of the rules. The "2" and the "3" can't go in any of the darkened areas, and they obviously can't go in the boxes where the "4" and the "5" are. This only leaves the two square that are highlighted yellow.

				2	3			1
	4							
		5	1					
2								
3								

3. Look at the first row and the third row. Neither row can have any additional "1"s because both already have a "1." The first row and the third row are darkened because a "1" can't go in either row.

				2	3			1
	4							
		5	1					
2								
3								

4. Look at the 3x3 block in the upper left corner. A "1" has to go somewhere in this box because of the rules. The "1" can't go in any of the darkened areas or the locations of the "2" and the "3," and it obviously can't go in the boxes where the "4" and the "5" are. This only leaves the square that is highlighted green.

				2	3			1
	4							
		5	1					
2								
3								

## Advanced Tips & Guides- Method 2

To the right is an example of a partial Sudoku puzzle. Using only the given information, there is a way for you to locate the position of a "1" on the grid. Can you figure it out? Move your mouse over the puzzle to reveal the answer. The correct position will be highlighted in green.

			5	6	7		
	2	3					
	4						
8							
9							

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### Step-by-Step Explanation:

1. Look at the box in the upper left corner. You can figure out that this box is "1" by elimination. The box can't be "2," "3" or "4" because those numbers are already in the same 3x3 block. The box can't be "5," "6" or "7" because those numbers are already in the same row. Finally, the box can't be "8" or "9" because those numbers are already in the same column. The only remaining number is "1," which is represented by the green highlighted square.

			5	6	7		
	2	3					
	4						
8							
9							