

## Squiggly Sudoku Puzzle for 01/20/19

To solve this puzzle, place the numbers 1 through 9 exactly once in each Row, Column and 9 block Shape.

I will show you step by step how I solved this puzzle. The numbers in black are the original puzzle. Each step is marked in red. The blue numbers are what has gone before.

Using three basic rules we complete the puzzle.

### Rule #1

Each numeral must appear once in each Row.

### Rule #2

Each numeral must appear once in each Column.

### Rule #3

Each numeral must appear once in each Shape.

	7		6					8
				2	5	4		7
7					9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
			3					5
8		7	9	6				
3					7		5	

Examining the Shape on the left we see the 8 can only go one place. Rule #3.

	7		6					8
				2	5	4		7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
			3					5
8		7	9	6				
3					7		5	

Using the same method we place the 8 in Row 2.

Rules #1 and #3  
The 1 in Column 1.

	7		6					8
			8	2	5	4		7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
			3					5
8		7	9	6				
3					7		5	

	7		6					8
1			8	2	5	4		7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

We need a 2 in Column 1. Rule #3 again.

Rule #3. Number must appear once in each Shape. Fill in the 6 in Row 2.

	7		6					8
			8	2	5	4		7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

	7		6					8
1			8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

Complete the Row using Rule #2. Number must appear once in each Column.

	7		6					8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

Rule #3. The 4 in Column 2 must go in that shape.

4	7	1	6	5				8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

Fill in the Shape, top left. The missing #s are 1, 4 and 5.

4	7	1	6	5				8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
		8		1		7		
	2			9		3	1	4
2			3					5
8		7	9	6				
3					7		5	

Rule #2 and #1. Number must appear once per Column and Row. The 5 in Column 2.

4	7	1	6	5				8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3					5
8	5	7	9	6				
3					7		5	

Row 1 needs a 2, 3 and 9. The 2 must be in Column 6. Rule #3.

Finish the square, top left. Start with the 5.

4	7	1	6	5	2			8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3					5
8	5	7	9	6				
3					7		5	

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8				9	5	2	1
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3					5
8	5	7	9	6				
3					7		5	

The missing #s in Row 1 are 3 and 9.

In Column 5, the 3 must be in Row 3. The 8 is at the bottom and the seven is in Row 7.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8				9			
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3					5
8	5	7	9	6				
3					7		5	

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2		4			7	
	4	8		1		7		
	2			9		3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

Row 6, Rule #3

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2		4			7	
	4	8		1		7		
	2			9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

Finish Row 4.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2	5	4	1	8	7	6
	4	8	2	1	6	7		
	2			9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

Finish the Shape in the middle, start with the number 6.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2	5	4			7	
	4	8	2	1	6	7		
	2			9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

Row 5 needs a 3, 5 and 9

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
	2			9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

What's missing in Column 1?

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2			9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

We are missing a 4 and 6 in Row 3.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

Now the rest of Row 6.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8			3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2			3	7				5
8	5	7	9	6				
3				8	7		5	

The missing 2 and 8 in the Shape on the right.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2			3	7			8	5
8	5	7	9	6				2
3				8	7		5	

Finish Columns 4, 8 and 9

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2			3	7			8	5
8	5	7	9	6			4	2
3			1	8	7		5	9

Finish Columns 2, 3 and 6

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2	1	9	3	7	4	6	8	5
8	5	7	9	6	3		4	2
3	6	4	1	8	7		5	9

Starting with Column 6, fill in Row 7

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2	1	9	3	7	4	6	8	5
8	5	7	9	6			4	2
3			1	8	7		5	9

Finish the puzzle.

4	7	1	6	5	2	9	3	8
1	9	3	8	2	5	4	6	7
7	8	6	4	3	9	5	2	1
9	3	2	5	4	1	8	7	6
5	4	8	2	1	6	7	9	3
6	2	5	7	9	8	3	1	4
2	1	9	3	7	4	6	8	5
8	5	7	9	6	3	1	4	2
3	6	4	1	8	7	2	5	9