

COVID-19 Survival Pack

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General Rules

In these uncertain times, I have prepared a set of 10 Sudoku puzzles which are also, in some sense, uncertain.

Each puzzle follows the standard rules of Sudoku: a digit from 1 to 9 is to be placed into each cell so that every row, column, and outlined 3x3 region contains each digit exactly once.

Each puzzle also has two variant rules that apply to it to some degree. These variant rules, and how they combine, are described along with the individual puzzles.

The puzzles are not arranged in order of difficulty or how long I think they will take to solve. I have tried to present the puzzles in an order that places more familiar variants towards the start, and rarer variants towards the end.

1. Diagonal or Anti-Diagonal Sudoku

Diagonal Marked diagonals must contain each digit exactly once.

Anti-Diagonal Marked diagonals must contain exactly three distinct digits.

Combination Rule One of the marked diagonals follows Diagonal Sudoku rules, and the other follows Antidiagonal Sudoku rules.

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

2. Clone or Extra Regions Sudoku

Clone Identical shaded regions must contain the same digits in corresponding locations.

Extra Regions Shaded regions must contain each digit exactly once.

Combination Rule There are three identical shaded regions in the grid. Two of them are clones, and the third is an extra region.

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

3. Killer or Somewhere Sudoku

Killer Digits in marked cages must sum to the total given in its top-left corner. Digits cannot repeat in a cage.

Somewhere Marked cages must contain each of the digits that are written in its top-left corner. Digits cannot repeat in a cage.

Combination Rule Each cage follows either Killer Sudoku rules, or Somewhere Sudoku rules, or both.

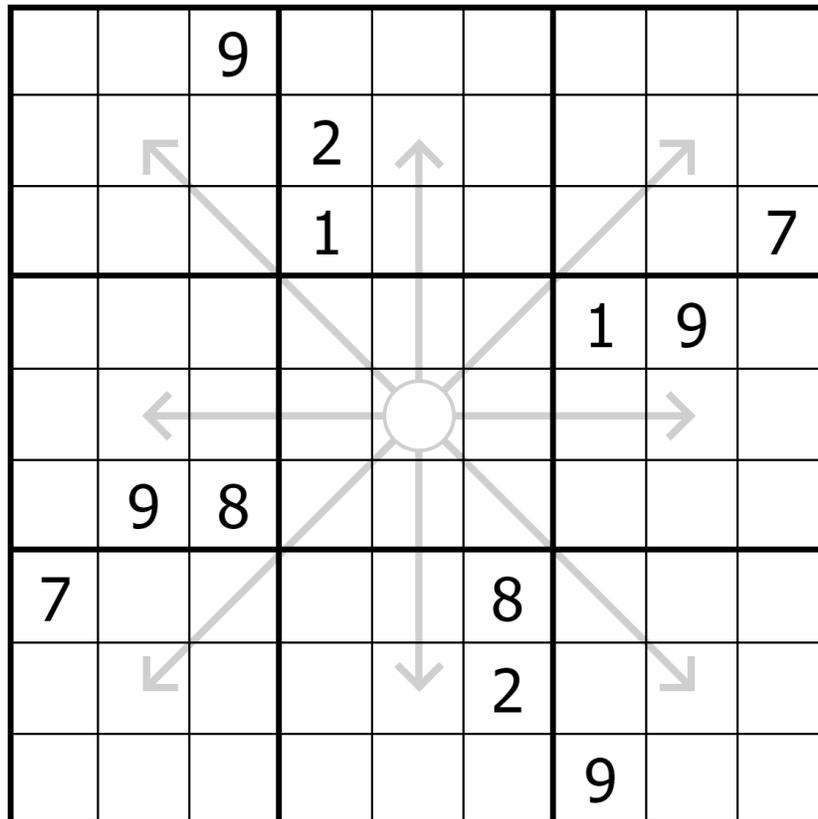
15		23	23			14		12
7				14		17	24	
	15		24					
21				18			28	
					23			
24		3	17			13		15
13			19			9		
	16						17	

5. Sum or Average Arrow Sudoku

Sum Arrow Digits placed in a circle must be equal to the sum of the digits along the adjoining arrow.

Average Arrow Digits placed in a circle must be equal to the average of the digits along the adjoining arrow.

Combination Rule Each arrow follows either Sum Arrow Sudoku rules or Average Arrow Sudoku rules.



6. Palindrome or Creasing Sudoku

Palindrome Digits placed on marked lines must form a palindromic sequence.

Creasing Digits placed on marked lines must form a strictly increasing or decreasing sequence.

Combination Rule Each marked line follows either Palindrome Sudoku rules or Creasing Sudoku rules.

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

7. Renban or Anti-Renban Sudoku

Renban Shaded regions must contain a set of distinct, consecutive digits.

Anti-Renban Shaded regions must contain a set of distinct digits, no two of which are consecutive.

Combination Rule Each shaded region follows either Renban Sudoku rules or Anti-Renban Sudoku rules.

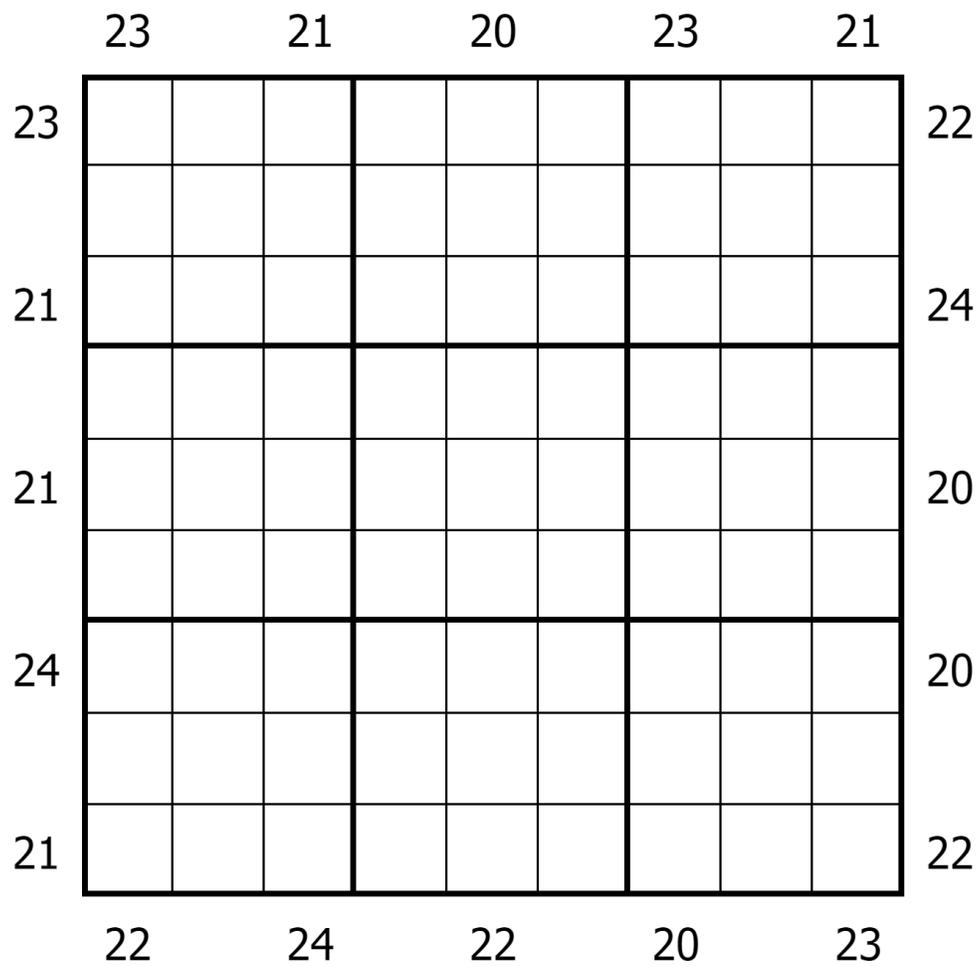
				8				
		4	5		9	6		
	2						8	
	3						5	
6								8
	9						2	
	6						4	
		8	4		5	2		
				6				

8. Frame or X-Sums Sudoku

Frame Clues outside the grid give the sum of the first three digits in the corresponding direction.

X-Sums Clues outside the grid give the sum of the first X digits in the corresponding direction, where X is the first of those digits.

Combination Rule Each clue follows either Frame Sudoku rules, or X-Sums Sudoku rules, or both.



9. Outside or Next To Nine Sudoku

Outside Digits appearing in clues must be placed in the first three cells in the corresponding direction.

Next To Nine Clues give all digits that are directly adjacent to the 9 within the corresponding row or column.

Combination Rule Each clue follows either Outside Sudoku rules, or Next To Nine Sudoku rules, or both.

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

