UKPA Open Tournament
1st March, 2025

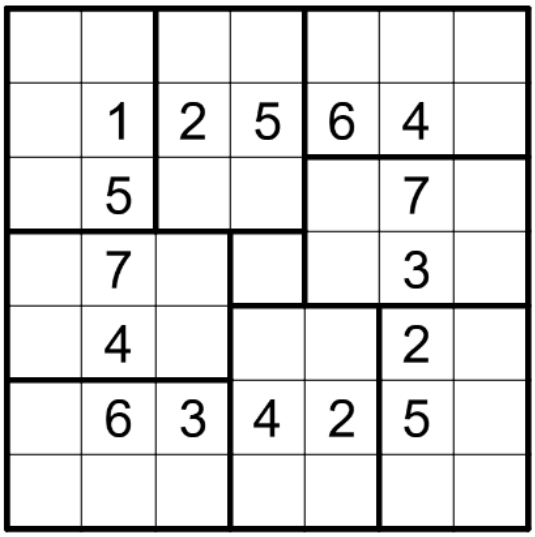
Round 3
Puzzles by Malrog

	Puzzle	Points
1	Deficit Sudoku	
2	Surplus Sudoku	
3	X Sums Sudoku	
4	Search Next Sudoku	
5	Palindrome Sudoku	
6	Thermometer Sudoku	
7	Arrow Sudoku	
	Total	

Time ?? minutes.

1 – Deficit Sudoku ()

Place a number from 1-7 in each empty cell in the grid such that each row and column contains each number exactly once, and each marked 6 cell region contains each number at least once.

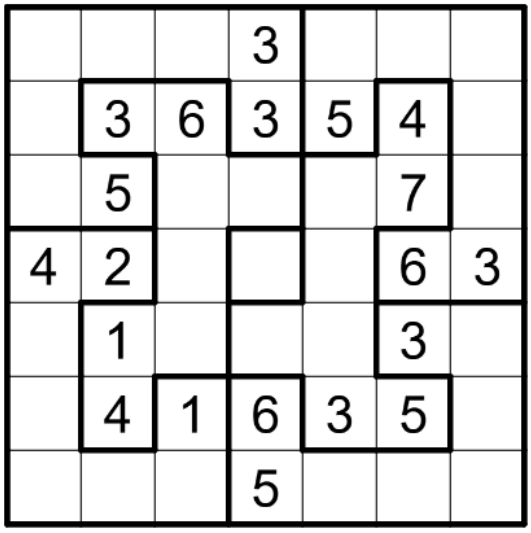


	1	2	5	6	4	
	5				7	
	7				3	
	4				2	
	6	3	4	2	5	

4	3	6	7	5	1	2
7	1	2	5	6	4	3
2	5	4	3	1	7	6
6	7	1	2	4	3	5
3	4	5	6	7	2	1
1	6	3	4	2	5	7
5	2	7	1	3	6	4

2 – Surplus Sudoku ()

Place a number from 1-7 in each empty cell in the grid such that each row and column contains each number exactly once, and each marked 8 cell region contains each number at least once.

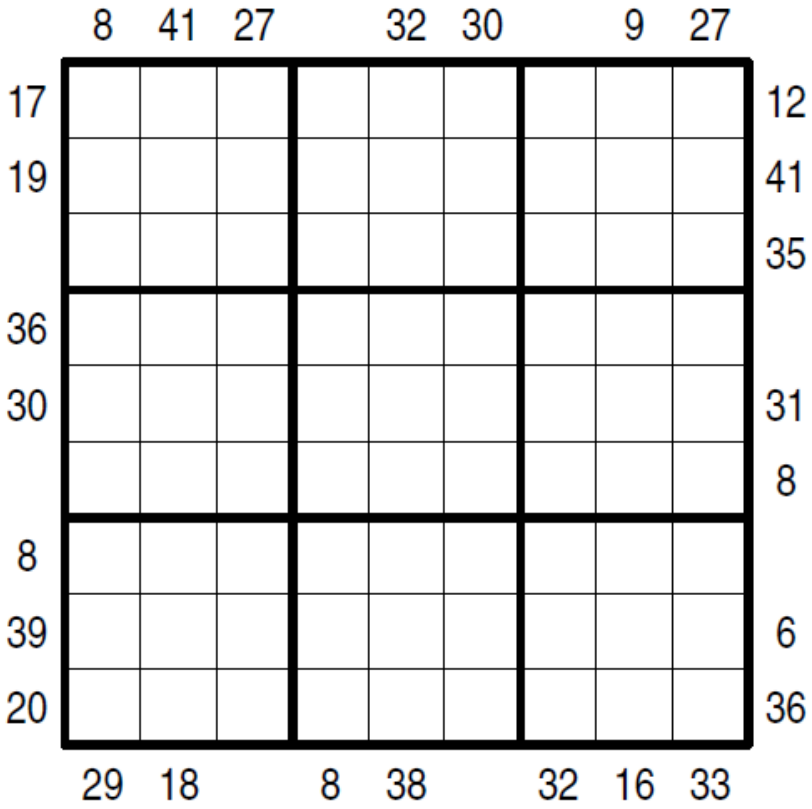


			3			
	3	6	3	5	4	
	5				7	
4	2				6	3
	1				3	
	4	1	6	3	5	
			5			

1	6	4	3	7	2	5
7	3	6	3	5	4	1
3	5	2	1	6	7	4
4	2	5	7	1	6	3
5	1	7	4	2	3	6
2	4	1	6	3	5	7
6	7	3	5	4	1	2

3 – X Sums Sudoku ()

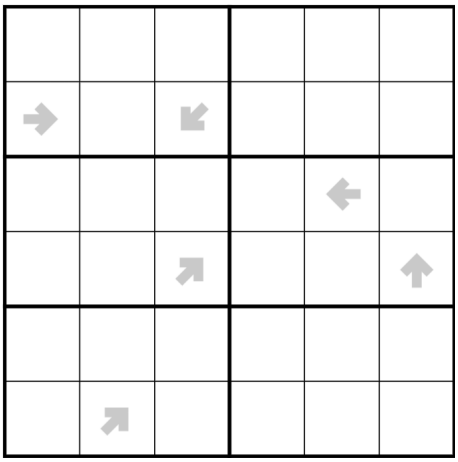
Normal Sudoku rules apply.
Additionally, clues outside the grid indicate the sum of the first X digits placed in the corresponding direction, where X is equal to the first digit placed in that direction.



	8	41	27		32	30		9	27	
17	3	8	6	9	7	5	1	2	4	12
19	4	9	5	1	2	6	3	7	8	41
	1	7	2	4	3	8	9	5	6	35
36	8	2	3	5	1	4	7	6	9	
30	6	1	4	3	9	7	2	8	5	31
	9	5	7	8	6	2	4	1	3	8
8	2	6	8	7	4	3	5	9	1	
39	7	3	9	6	5	1	8	4	2	6
20	5	4	1	2	8	9	6	3	7	36
	29	18		8	38		32	16	33	

4 – Search Next Sudoku ()

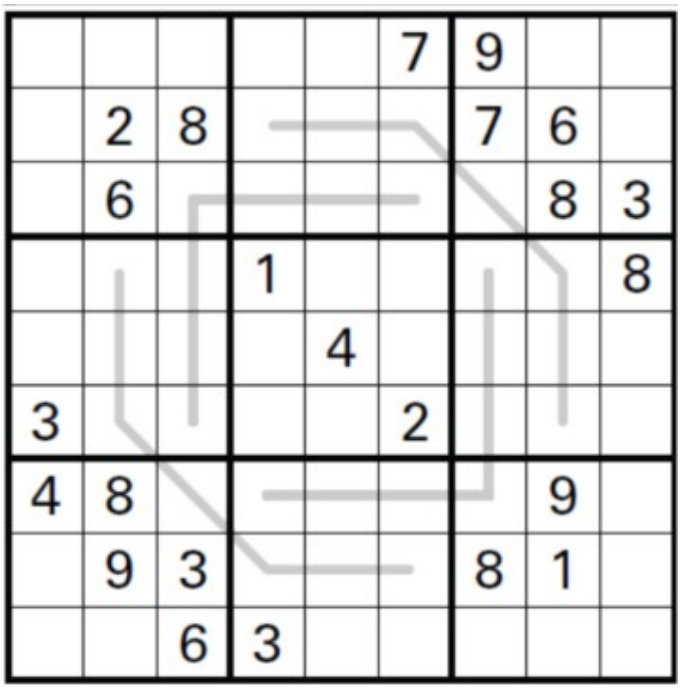
Normal Sudoku rules apply.
Additionally, if a digit N is on an arrow, then the digit N+1 must be N cells away in the indicated direction e.g. if r2c1 is a 3 then r2c4 must be a 4.



3	5	2	6	1	4
4	6	1	2	5	3
5	2	6	3	4	1
1	4	3	5	6	2
2	1	5	4	3	6
6	3	4	1	2	5

5 – Palindrome Sudoku ()

Normal Sudoku rules apply.
Additionally, numbers placed along marked lines must form a palindromic sequence e.g. 1234321.

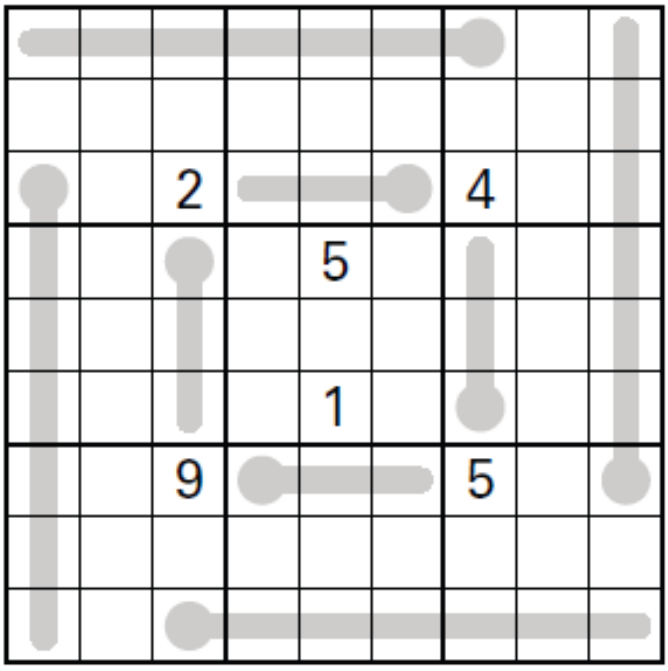


					7	9		
	2	8				7	6	
	6						8	3
			1					8
				4				
3					2			
4	8						9	
	9	3				8	1	
		6	3					

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

6 – Thermometer Sudoku ()

Normal Sudoku rules apply.
Additionally, starting at the “bulb,” numbers placed along each marked thermometer must form an increasing sequence.

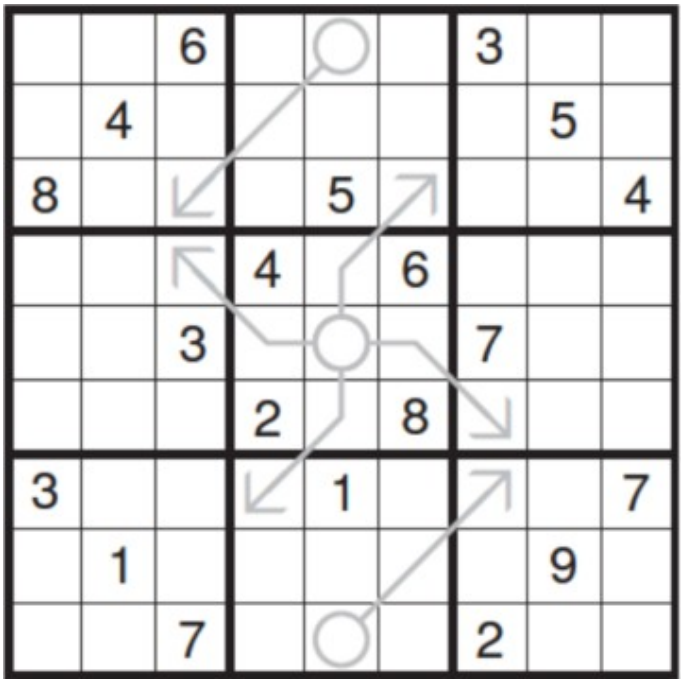


		2				4		
				5				
				1				
		9				5		

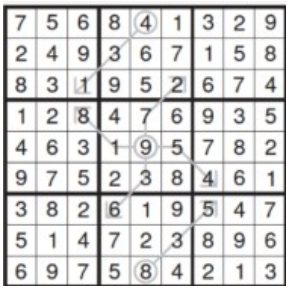
9	8	6	5	4	2	1	3	7
3	5	4	7	8	1	2	9	6
1	7	2	9	6	3	4	8	5
2	6	3	8	5	7	9	1	4
4	1	7	6	2	9	8	5	3
5	9	8	3	1	4	7	6	2
6	3	9	4	7	8	5	2	1
7	2	5	1	9	6	3	4	8
8	4	1	2	3	5	6	7	9

7 - Arrow Sudoku ()

Normal Sudoku rules apply,
Additionally, the numbers in the circled cells must be equal to the sum of the digits along their attached arrows. Digits may repeat along an arrow, subject to the normal rules of sudoku.



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



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