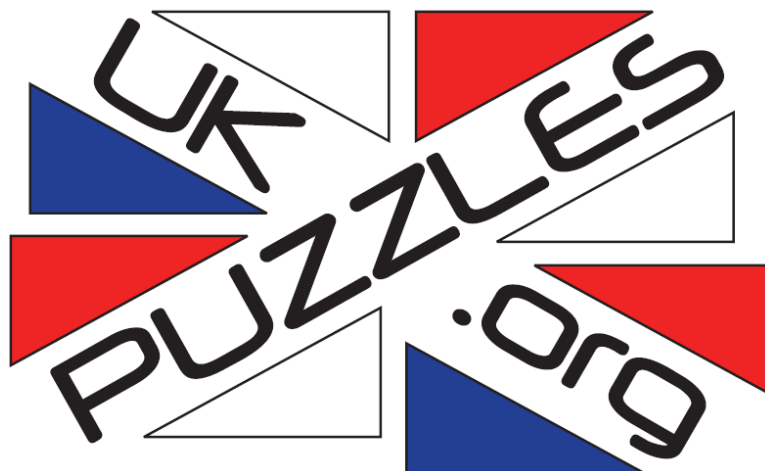




UKPA Open Tournament

1st - 2nd April, 2023

Round 2

Puzzles by Jovi AI

	Puzzle	Points
1	Extra Region Sudoku	21
2	Clone Sudoku	15
3	Sandwich Sudoku	46
4	X Sums Sudoku	39
5	Arrow Sudoku	23
6	Thermometer Sudoku	50
7	German Whispers Sudoku	55
8	Palindrome Sudoku	67
	Total	316

Time 45 minutes.

1 Extra Region Sudoku (21)

Place 1-9 once each into every row, column and bold-lined 3x3 box.

Additionally, each of the shaded regions must also contain the numbers 1-9 exactly once.

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

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

2 Clone Sudoku (15)

Place 1-9 once each into every row, column and bold-lined 3x3 box.

Additionally, in each shaded region of the same shape, the numbers placed in corresponding cells of the regions must be the same.

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

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

3 Sandwich Sudoku (46)

Place 1-9 once each into every row, column and bold-lined 3x3 box.
Additionally, the numbers outside the grid give the sum of all the numbers that are between 1 and 9 in the respective row or column.

	14	11	22	31	5	12	27	7	5
20	9								7
22									
7									
21									
32				2					
8									
6									
14									
8	4								5

	14	11	22	31	5	12	27	7	5
20	9	5	2	4	6	3	1	8	7
22	6	4	3	1	8	7	5	2	9
7	8	7	1	2	5	9	4	6	3
21	1	8	7	6	9	4	3	5	2
32	3	9	6	5	2	8	7	4	1
8	5	2	4	7	3	1	8	9	6
6	2	3	5	8	1	6	9	7	4
14	7	6	9	3	4	5	2	1	8
8	4	1	8	9	7	2	6	3	5

4 X Sums Sudoku (39)

Place 1-9 once each into every row, column and bold-lined 3x3 box.
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										12
19										41
										35
36										
30										31
										8
8										
39										6
20										36
	29	18		8	38		32	16	33	

	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	

5 Arrow Sudoku (23)

Place 1-9 once each into every row, column and bold-lined 3x3 box. **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.

The grid is an 8x8 Sudoku with bold-lined 3x3 boxes. Clues and arrows are as follows:

- Row 1: (1,3)=6, (1,6)=3
- Row 2: (2,2)=4, (2,7)=5
- Row 3: (3,1)=8, (3,4)=5, (3,8)=4
- Row 4: (4,3)=4, (4,6)=6
- Row 5: (5,3)=3, (5,7)=7
- Row 6: (6,3)=2, (6,6)=8
- Row 7: (7,1)=3, (7,4)=1, (7,8)=7
- Row 8: (8,2)=1, (8,7)=9, (8,8)=2

Arrows originate from circled cells:

- (1,4) points down-left to (3,2), then down to (5,4), then down-right to (7,6).
- (3,4) points up-left to (1,2), then up to (1,4), then right to (1,6).
- (5,4) points left to (5,2), then up to (4,2), then up-right to (3,4).
- (6,4) points down-left to (7,2), then down to (8,4).
- (6,6) points right to (6,8).
- (7,4) points up-left to (5,2), then up to (4,2), then up-right to (3,4).
- (7,6) points down-right to (8,8).

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

6 Thermometer Sudoku (50)

Place 1-9 once each into every row, column and bold-lined 3x3 box. **Additionally**, starting at the “bulb,” numbers placed along each marked thermometer must form a strictly increasing sequence.

The grid is an 8x8 Sudoku with bold-lined 3x3 boxes. Clues and thermometers are as follows:

- Row 1: (1,3)=2, (1,6)=4
- Row 2: (2,4)=5
- Row 3: (3,4)=1
- Row 4: (4,3)=9, (4,6)=5

Thermometers (bulbs at the start of the sequence):

- Horizontal: (1,1)-(1,4), (2,3)-(2,5), (4,2)-(4,5), (8,2)-(8,8)
- Vertical: (1,1), (2,1), (3,1), (4,1), (5,1), (6,1), (7,1), (8,1), (3,8), (4,8), (5,8), (6,8), (7,8), (8,8)

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 German Whispers Sudoku (55)

Place 1-9 once each into every row, column and bold-lined 3x3 box.

Additionally, adjacent digits along the marked line have a difference of at least 5.

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

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

8 Palindrome Sudoku (67)

Place 1-9 once each into every row, column and bold-lined 3x3 box.

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