



INSTRUCTION BOOKLET

Swiss Qualification Tournament
for the
17th World Sudoku Championship

May 3 – 6, 2024



Tournament Details

The tournament will take place on the website of Logic Masters Germany:

<https://logic-masters.de/Wettbewerbe/CE/wettbewerb.php?id=245>

The tournament will be open from **Friday, May 3, 12:00 CEST** to **Monday, May 6, 23:59 CEST**.

To start the tournament, follow the indications on the website. There are two PDF documents involved:

- one is the instruction booklet that you are reading now which contains the rules and examples of the different variants of puzzles appearing in the tournament.
- the second document is an encrypted PDF file of 9 pages containing the actual tournament puzzles. This document will be available for download just before the tournament. Starting the tournament will give the player the password to decrypt the PDF file.

Answer codes:

- Once you start the tournament, you will be given **120 minutes** to submit the answer codes. It is therefore recommended to start before Monday May 6 at 21:59 CEST to make it before the end of the tournament time window.
- Answer codes differ between the puzzle types. They are explained next to each puzzle type. It is recommended to study the answer codes carefully before starting the competition.
- If several rows or columns of a puzzle are marked for the answer code, first enter the answer codes of the rows from top to bottom, followed by the answer codes of the columns from left to right.
- The answer codes can be changed and/or entered multiple times without penalty during these 120 minutes.

For each correctly solved puzzle you will be awarded the marked points. Wrong answers will not get any minus points.

The answers are only stored when clicking the submit button. They are **not** submitted automatically when the time is over. You can submit as often as wished in the time limit.

No solving programs or calculators are allowed.

The tournament is destined to evaluate the admission of Swiss players to the World Sudoku Championship 2024. Players from all nations are kindly welcome to compete, too.

The puzzles in this tournament have been created by Roger Kohler. For **questions**, feel free to ask on the Discord server of the World Puzzle Federation (<https://discord.gg/NM9xn6Rm9k>, under events) or contact Roger Kohler directly (email: ropeko@yahoo.de, phone: +41798134273).

International test solvers helped to make sure the puzzles are valid and to synthesize an adapted number of points per puzzle. The number of points gives an indication of the difficulty of the puzzle.

Special thanks to the website Logic-Masters.de by making the online qualification possible, and to the test solvers Denis Auroux, Hatice Esra Yaka, Ulla Elsilä, Christian König, Anne Limoges and Tiit Vunk.

List of Puzzles

Nr	Puzzle type	Points
1	Classic Sudoku (6x6)	7
2	Classic Sudoku (6x6)	33
3	Classic Sudoku	39
4	Classic Sudoku	41
5	Classic Sudoku	62
6	Classic Sudoku	60
7	Classic Sudoku	92
8	Diagonal Sudoku	38
9	Windoku	110
10	No Touch Sudoku	68
11	Antiknight Sudoku	74
12	Irregular Sudoku	93
13	Palindrome Sudoku	83
14	Thermo Sudoku	119
15	Wilhelm Tell Sudoku	133
16	Frame Sudoku	148
	Total	1200

1-2 Classic Sudoku (6x6) – 7+33 Points

Place a digit from 1-6 in each empty cell in the grid such that each row, column and marked 2x3 box contains each digit exactly once.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

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

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

Answer code:
513624 451236

3-7 Classic Sudoku – 39+41+62+60+92 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

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

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

Answer code: 251734986 872359164

8 Diagonal Sudoku – 38 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Each marked diagonal must also contain each digit from 1-9 exactly once.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

The diagram illustrates the transformation of a Diagonal Sudoku puzzle. On the left is the initial puzzle grid, and on the right is the solved grid. Arrows indicate the transformation from the initial state to the solved state.

Initial Puzzle Grid:

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

Solved Grid:

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

Answer code: 213768945 921853647

9 Windoku – 110 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Each shaded region must also contain each digit from 1-9 exactly once.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

The diagram illustrates the transformation of a Windoku puzzle. On the left is the initial puzzle grid, and on the right is the solved grid. Arrows indicate the transformation from the initial state to the solved state.

Initial Puzzle Grid:

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

Solved Grid:

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

Answer code: 671843925 948632571

10 No Touch Sudoku – 68 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Equal digits must not touch each other diagonally.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

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



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

Answer code: 329714685 681547923

11 Antiknight Sudoku – 74 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Digits placed in cells related by a chess Knight's move must be different.


Chess Knight's move: Two squares away horizontally and one square vertically, or two squares vertically and one square horizontally.

All grey cells can not contain 1.


The chess Knight's move explanation won't be added in the competition booklet.


Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:




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





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




Answer code: 195274368 497136528

12 Irregular Sudoku – 93 Points


Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 9-cell region contains each number exactly once.


Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:




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





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



Answer code: 985372461 619283547

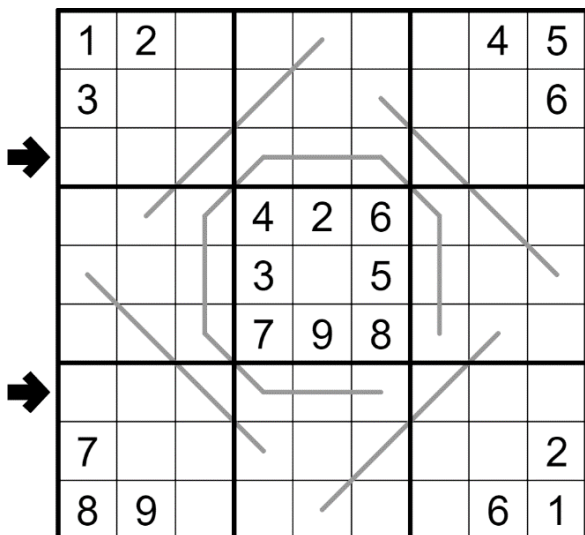
13 Palindrome Sudoku – 83 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

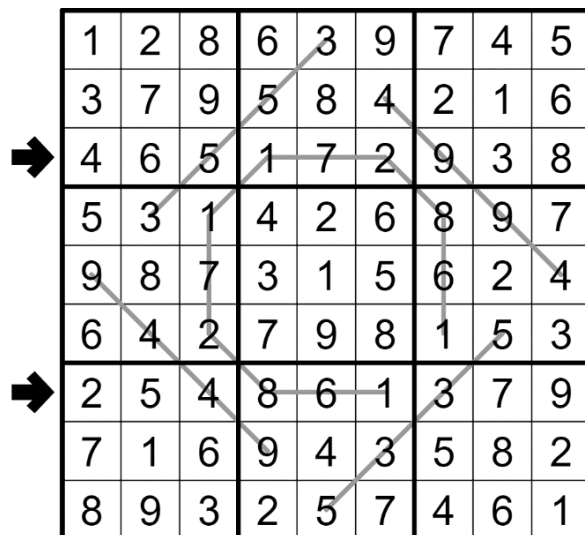
Digits along any grey line form a palindrome i.e. they read the same in both directions.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:



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

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

Answer code: 465172938 254861379

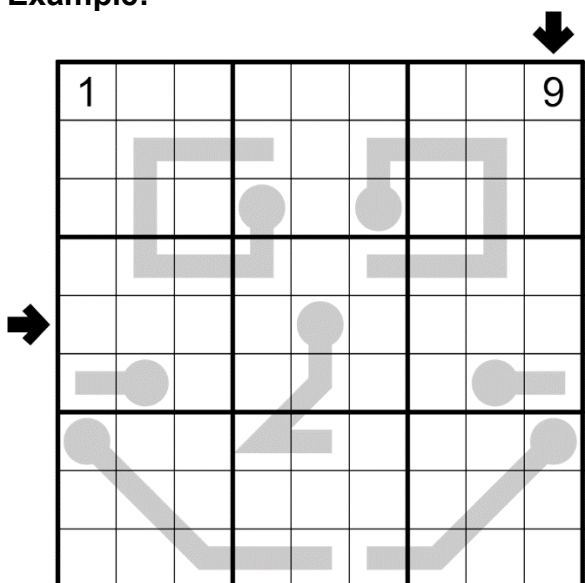
14 Thermo Sudoku – 119 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

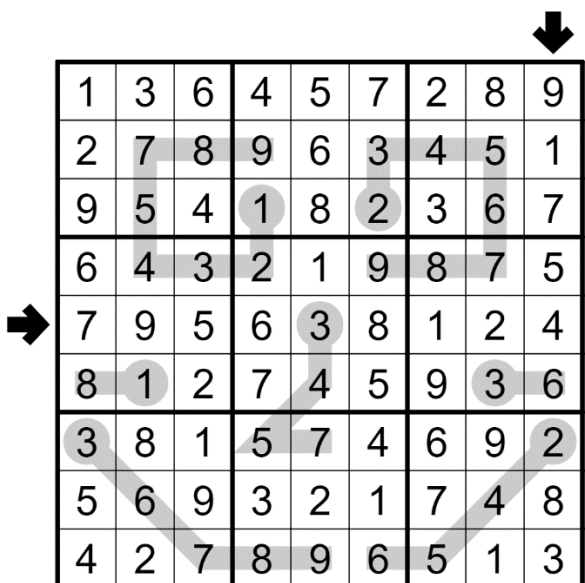
Starting at the "bulb", digits placed along each marked thermometer must form a strictly increasing sequence.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:



1								9

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

Answer code: 795638124 917546283

15 Wilhelm Tell Sudoku – 133 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

The sum of the numbers on an arrow are equal to the circle in the direction of the arrow. There is exactly one circle in the direction of an arrow. Numbers on an arrow can repeat.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom).

Example:

The example shows a 9x9 grid with arrows and target sums. The solution grid is as follows:

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

Answer code: 164293875 376521984

16 Frame Sudoku – 148 Points

Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked 3x3 box contains each digit exactly once.

Numbers outside the grid are equal to the sum of the first 3 digits appearing in the corresponding row or column.

Answer: For each designated row/column, enter its content, from left to right (or top to bottom). Do not include any numbers outside the grid.

Example:

The example shows a 9x9 grid with numbers outside the grid indicating the sum of the first three digits in each row or column. The solution grid is as follows:

7								
			2		4			
24			6		8			
18								
10								

Answer code: 316294785 962783451