



**Instructions  
for the  
Qualification  
(18th–21st of January 2019)**

**LOGIC  
MASTERS  
Deutschland e.V.**

Note: This translation is only provided for your convenience.  
In case of doubt, the german version is decisive.

## 1.–2. Classic Sudoku

10+20 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

Example and solution:

1	2		
	1		4
4			2

1	2	4	3
3	4	2	1
2	1	3	4
4	3	1	2

## 3. No-Touch-Sudoku

25 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

Cells, that touch diagonally, may not contain same numbers.

Example and solution:

					4
			5		
		1			
			3	1	
					2
2					

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

## 4. Compass-Sudoku

25 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

The numbers in the circles are the four numbers of the adjacent cells. The order of the numbers is irrelevant. Greater-as-signs denote, which of two numbers are greater.

Example and solution:

		3 <sup>2</sup> <sub>3</sub> <sup>4</sup>	↖ ↘
	2 <sup>4</sup> <sub>4</sub> <sup>2</sup>		3 <sup>1</sup> <sub>3</sub> <sup>1</sup>
↙		1 <sup>4</sup> <sub>1</sub> <sup>2</sup>	

1	3	2	4
		3 <sup>2</sup> <sub>3</sub> <sup>4</sup>	↖ ↘
2	4	3	1
	2 <sup>4</sup> <sub>4</sub> <sup>2</sup>		3 <sup>1</sup> <sub>3</sub> <sup>1</sup>
4	2	1	3
↙		1 <sup>4</sup> <sub>1</sub> <sup>2</sup>	
3	1	4	2

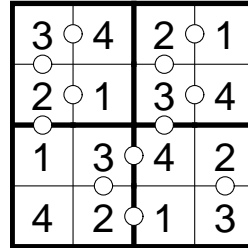
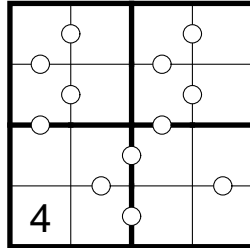
## 5. Dots-Sudoku

30 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

If there is a dot between tow cells, the numbers in these cells have to have a difference of 1. If there is not a dot, the difference must not be 1.

Example and solution:



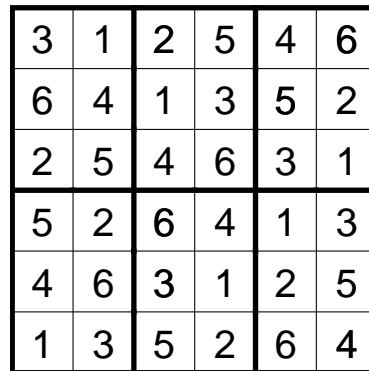
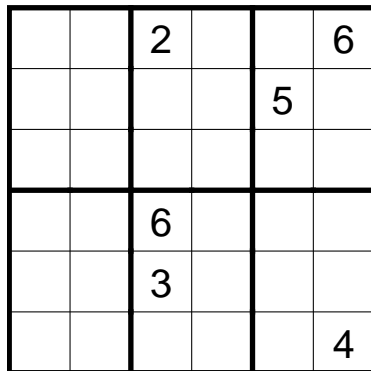
## 6. Anti-Knight-Sudoku

30 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

Cells in the distance of a knights jump (chess) may not contain same numbers.

Example and solution:



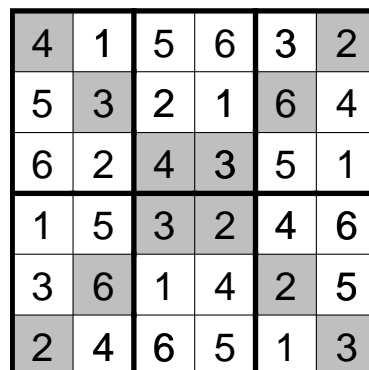
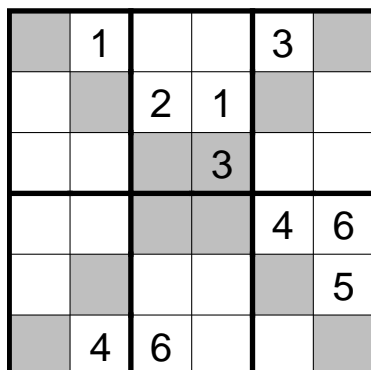
## 7. Anti-Diagonal-Sudoku

30 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

In every of the two marked diagonals, there have to be three different numbers and they have to appear exactly three times (in the example twice).

Example and solution:



## 8. Windoku

30 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column, every area and every square of gray cells, every number has to be exactly once.

Example and solution:

1		2	
2		3	

1	4	2	3
3	2	4	1
4	3	1	2
2	1	3	4

## 9. Little-Killer-Sudoku

30 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

The numbers outside the diagram give the sum of the numbers, that are in the diagonal marked by an arrow.

Example and solution:


Arrows and numbers: 4 (top-right), 4 (left), 5 (right), 12 (bottom-right), 2 (bottom)

3	4	2	1
2	1	4	3
1	2	3	4
4	3	1	2

Arrows and numbers: 4 (top-right), 4 (left), 5 (right), 12 (bottom-right), 2 (bottom)

## 10. Diagonal-Sudoku

35 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column, every area and every of the two marked diagonals, every number has to be exactly once.

Example and solution:

	4	1	
	2		

2	1	4	3
4	3	2	1
3	4	1	2
1	2	3	4

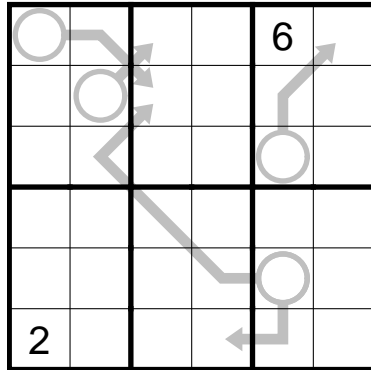
## 11. Arrow-Sudoku

35 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

For every arrow, the following holds: The number in the circle is the sum of all other numbers on that arrow.

Example and solution:



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

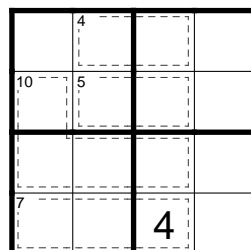
## 12. Killer-Sudoku

35 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

In dashed areas no number appears twice. The number in this area is the sum of all numbers in this area.

Example and solution:



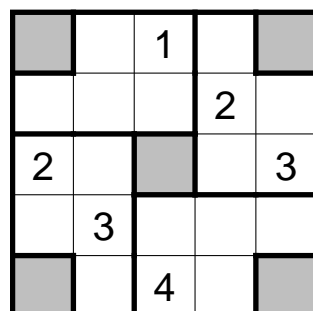
4	3	1	2
1	2	3	4
3	4	2	1
2	1	4	3

## 13. Jigsaw-Sudoku

40 points

Enter Numbers from 1 to 9 (in the example from 1 to 5) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once. The gray cells are considered to be an area too.

Example and solution:



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

## 14. Battenburg-Sudoku

40 points

Enter Numbers from 1 to 9 (in the example from 1 to 4) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

For the marked intersections the following holds: Two diagonally adjacent cells of that mark contain an even number and the other two contain an odd number. For intersections without marking, this is not the case.

Example and solution:

1			2

1	3	4	2
2	4	3	1
3	2	1	4
4	1	2	3

## 15. Odd-Labyrinth-Sudoku

40 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

Additionally you have to find a path through the grid, starting top left and ending bottom right, which uses only odd numbers.

Example and solution:

				6
	1			
		5		
2	3			

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

## 16. Disjoint-Groups-Sudoku

45 points

Enter Numbers from 1 to 9 (in the example from 1 to 6) into the cells of the diagram. In every row, every column and every area, every number has to be exactly once.

In different areas the numbers, that are at the same position inside of this area, have to be different.

Example and solution:

4				1
			6	
		3		2
			5	
5				3

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