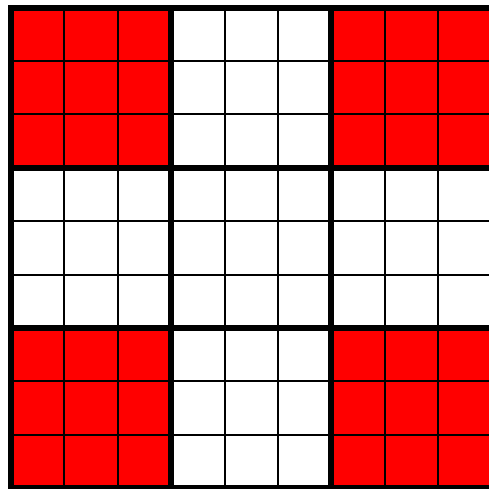


Swiss online
qualification tournament
for the 7th World Sudoku
Championship

12th -13th May 2012



Instructions booklet

Important points

- The duration of the tournament is 120 minutes;
- Answer key for all sudokus is one row (left-to-right) followed by one column (top-to-bottom), indicated by an arrow ➡. Don't separate codes with a coma or other special character (see the example for the 1st grid in the next page).
- All sudokus in this instructions booklet and in the tournament are created by Frédéric Stalder. There are additional examples at the end of this instructions booklet. More examples can be found on internet, for example on Frédéric Stalder's blog: <http://sudokuvariante.blogspot.com/>.
- The number of points awarded to each grid is related to the difficulty of the tournament's grid, according to tests conducted by experienced international players. The difficulty of the grids in this instructions booklet isn't related to the number of points of tournament's grids .
- The tournament pdf file will be available only in German.

Thanks

Thanks to Logic Masters Deutschland (<http://logic-masters.de/>) for hosting this tournament. Thanks to **Tom Collyer**, **Tiit Vunk**, **Agnieszka Buczma** and **Rishi Puri** for testing the grids.

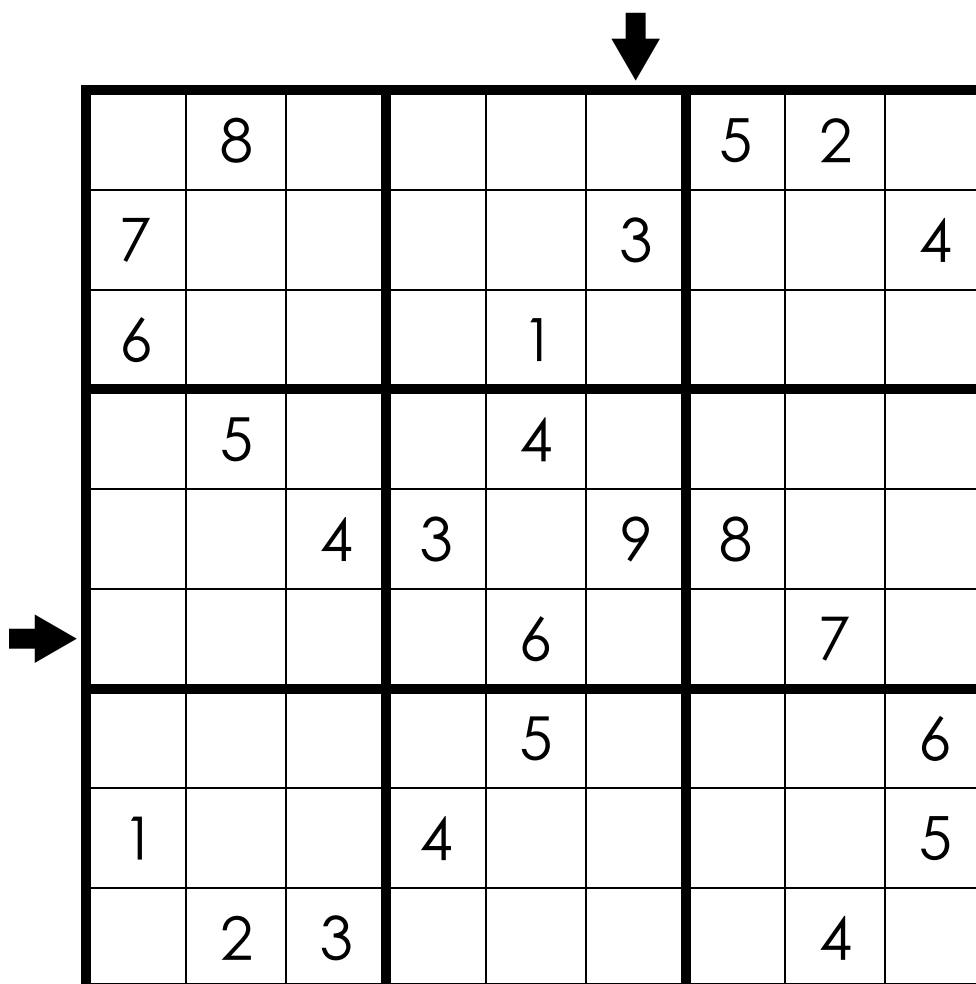
Sudokus and Points

	Grid	Points
1	Klassisches Sudoku (Classic sudoku) N°1	42
2	Klassisches Sudoku (Classic sudoku) N°2	59
3	Klassisches Sudoku (Classic sudoku) N°3	64
4	Windoku	56
5	Halbierte Quadrate Sudoku (Halved squares)	56
6	Diagonal Sudoku	63
7	Sudoku XV	65
8	Sudoku ohne Nachfolger (Non-consecutive)	83
9	Freiform Sudoku (Irregular sudoku)	86
10	Pfeile Sudoku (Arrow sudoku)	119
11	Thermo-sudoku	141
12	Killer Sudoku	166
TOTAL		1000

Examples

1 - 3. Klassisches Sudoku

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box.



Solution code: row 6 followed by column 6.

318265479734895126

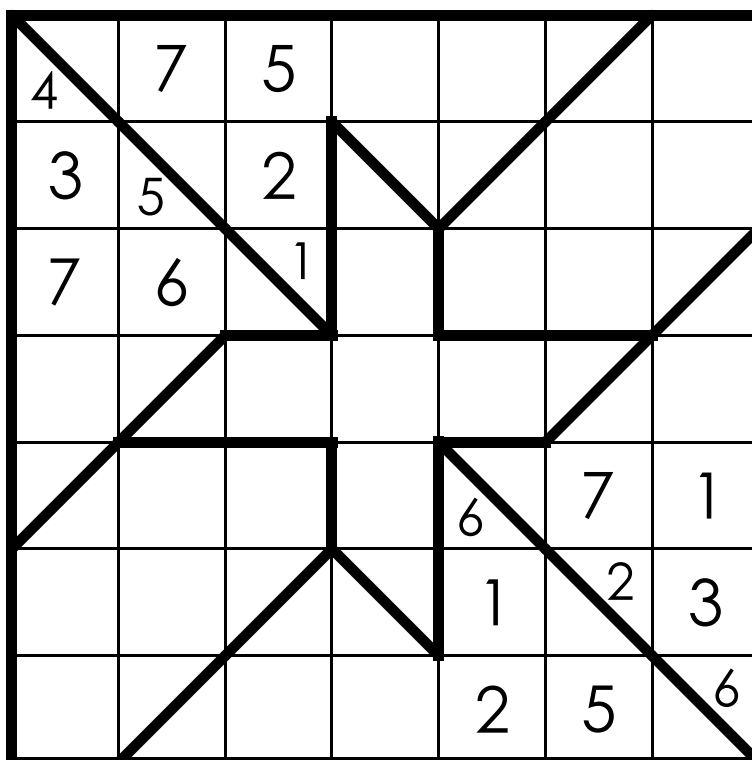
4. Windoku

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column, outlined box and in each of the four shaded areas.

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

5. Halbierte Quadrate Sudoku

Fill the grid with digits from 1 to 7, so that each digit occurs exactly once in every row, column and outlined area. Some cells are halved by one of the diagonals. For any such cell, exactly one of its two halves shall contain a number. That number is considered to belong to the row and column containing its cell, as well as to the area connected to the half cell the number is in.



6. Diagonal Sudoku

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column, outlined box and in each of the two main diagonals.

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

7. Sudoku XV

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box. Two neighbouring cells containing digits which sum equals 5 are always separated by a V. Two neighbouring cells containing digits which sum equals 10 are always separated by an X.

X		X	X		
			X	V	
	3	V		V	2
	X	X		V	
				X	V
X	X	V	X	X	
X	6	X		5	X
	X				
V			X		V
X					

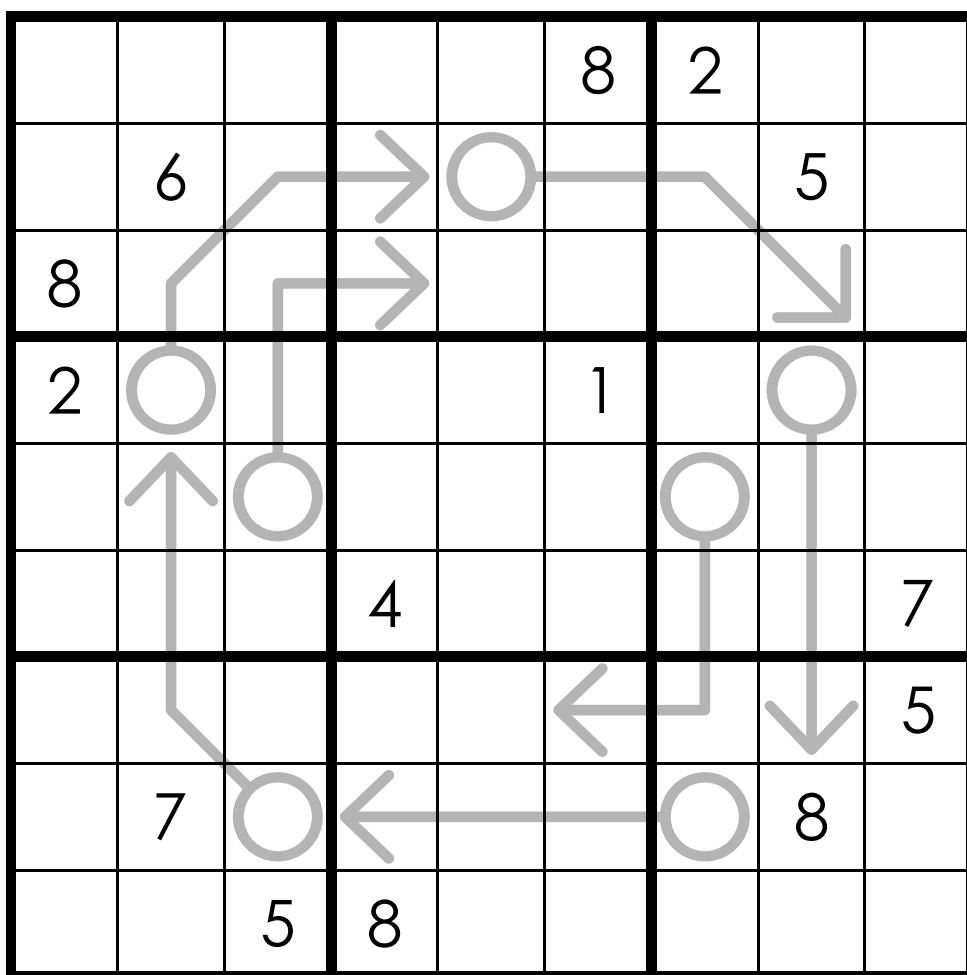
8. Sudoku ohne Nachfolger

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box. Vertically and horizontally adjacent cells cannot contain consecutive digits.

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

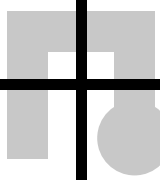
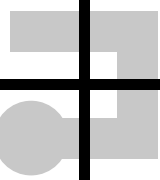
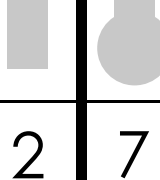
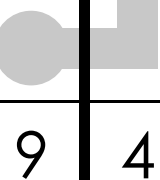

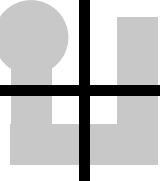
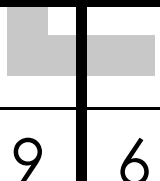
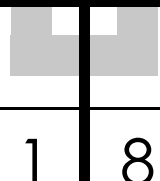
10. Pfeile Sudoku

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box. The digits in each circled cell must equal the sum of all the digits along the arrow's path; digits can repeat within an arrow.



11. Thermo-sudoku

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box. The digits in each "thermometer"-shaped region must be strictly increasing from the circular bulb to the end.

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

Additional examples

Klassisches Sudoku:

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

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

Freiform Sudoku (hard):

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

Pfeile Sudoku:

		7	2		6	8		
	1	↖				↗	6	
9	←						↗	7
6				○				5
			○	○	○			
4				○				1
7	↙						→	8
	4	↘					↘	5
		8	4		1	7		

This example shows how several arrows can start from the same circle

Thermo-sudoku:

		●						3
		—	—					2
9	3	8	4	1				6
		—	—					4
		●				●		
8					—	—	—	
5				2	8	6	9	1
3					—	—	—	
1						●		

This example shows how thermometers can be divided into several branches.

Solutions

Klassisches Sudoku

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

Windoku

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

Halbierte Quadrate Sudoku

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

Diagonal Sudoku

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

Sudoku XV

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

Sudoku ohne Nachfolger

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

Freiform Sudoku

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

Pfeile Sudoku

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

Thermo-sudoku

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

Killer Sudoku

19	4	15	7	15	2	6	18	8	1	5	19	3
6	5	3	7	1	9	23	8	2	4			
18	3	1	2	19	3	4	5	6	9	7		
1	23	6	8	9	12	7	11	4	9	3	5	
2	10	3	4	13	5	8	1	7	6	18	9	
19	5	7	9	20	4	3	9	6	2	1	8	
4	13	2	5	6	7	3	17	9	8	1		
3	18	8	6	18	1	9	4	15	7	12	2	
7	9	1	8	5	2	3	4	6				

Klassisches Sudoku (additional)

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

Klassisches Sudoku (additional)

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

Freiform Sudoku (additional)

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

Pfeile Sudoku (additional)

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

Thermo-sudoku (additional)

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