Introduction. These are the instructions for the 2014 World Sudoku Championship, hosted and organised by the UK Puzzle Association. Any questions related to these instructions should be raised and discussed in the competition discussion thread: *http://forum.ukpuzzles.org/viewforum.php?f=24*.

General Rules. (To be finalised in the next version.)

Appeals Procedure. (To be finalised in the next version.)

Scoring and Bonus. Points will be awarded only for 100% correctly solved puzzles. There will be no partial credit.

A bonus of 10 points for each full minute remaining will apply to any competitor who correctly solves every puzzle in a round.

At the judge's discretion, $0.75 \times$ bonus will be awarded in the case of a single minor mistake: at most two incorrectly placed numbers in at most one puzzle.

Play-offs

Overview. The top 10 competitors from the individual competition will qualify for the play-offs. This is broken down into three rounds. The format of each round is a set of well-known Sudoku variants, to be solved in a fixed order. See the examples later for details of the puzzles.

The first round features competitors 7-10, with staggered starts determined by points differences. See below for details.

The winner of the first round (A) will progress into the second round, along with competitors 4-6. A will have a staggered start as determined by 7th place.

Similarly, the winner of the second round (B) will progress into the third and final round, with competitors 1-3. *B* will have a staggered start as determined by position 4th place. This round will determine the podium places for the 2014 World Sudoku Championship.

Staggered starts. Let S_1, S_2, \ldots, S_{10} be the points scores of the top 10 competitors. Define

$$B = \frac{600}{S_1 - S_{10}}.$$

The staggered start, in seconds, for competitor *i* in the first round is: $B(S_7 - S_i)$.

The staggered start, in seconds, for competitor *i* in the second round is: $B(S_4 - S_i)$.

The staggered start, in seconds, for competitor *i* in the third round is: $B(S_1 - S_i)$.

Solving and submission. When a competitor completes a puzzle, they must raise their hand to indicate to a judge to enter the submission period.

The entire grid will then be judged over the next minute. After one minute, if the puzzle is correct, the judge will allow the competitor to begin the next puzzle. If the puzzle is incorrect, the judge will return the incorrect puzzle to the competitor with one incorrectly placed number indicated. The competitor can resubmit a returned sudoku at any time, and will again enter the submission period.

Puzzle Rules and Examples

Important. The example puzzles are a true reflection in quantity, grid dimension and format of the corresponding competition puzzles wherever possible. Some irregularly shaped grids may have different geometric layouts. The competition puzzles will appear at a significantly larger size - one per page. The difficulty of an example puzzle is not necessarily reflective of the difficulty of the corresponding competition puzzle.

Puzzle Credits. Authors will remain anonymous individually until the solutions are distributed. The organisers would like to collectively thank Shinichi Aoki, Tom Collyer, Yousuke Imai, Noaki Inaba, Masahiro Kaneko, Masatoshi Kengo, David Millar, James McGowan, Gareth Moore, Tetsuya Nishio, Ko Okamoto, Puzzler Media, Minako Sakai, Richard Stolk, Trevor Truran and the World Puzzle Federation for the example and competition puzzles.

Round 1

Monday 11th August 2014, 09:00 - 09:20

20 minutes - 200 total points

Classic Sudoku (×10)

points

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

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

Monday 11th August 2014, 09:30 - 10:15

45 minutes - total points

Surplus Sudoku

points

Rules: 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	2	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	2	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

Deficit Sudoku

points

points

Rules: 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 most 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

Irregular Sudoku

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

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

points

Diagonal Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each marked diagonal must also contain each number from 1-9 exactly once.

· · · ·					3	8		
				4	7			
6				2				
8	9							
	2	3				7	8	
					``.		3	6
				3		```.		4
			1	6			· · ·	
		7	8					

2	5	9	6	1	3	8	4	7
3	8	1	9	4	7	2	6	5
6	7	4	5	2	8	9	1	З
8	9	6	3	7	1	4	5	2
1	2	3	4	5	6	7	8	9
7	4	5	2	8	9	1	3	6
5	1	8	7	3	2	6	9	4
9	3	2	1	6	4	5	7.	8
4	6	7	8	9	5	3	2	, T

Windoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each of the four shaded 3×3 regions must also contain each number from 1-9 exactly once.

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

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

Odd Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in shaded cells must be odd.

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

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

Non-Consecutive Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in adjacent cells must not be consecutive.

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

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

Killer Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.

						_		
20		9		17	9		20	
		22	16		27	18		
8								11
				15				
12						22		
8	30				17			11
	11			19		16		
24							17	
		16			10			

					_		
3	°2	7	¹⁷ 9	°8	1	²5	4
7	² 8	¹⁶ 1	6	² 5	ືສ	9	2
9	5	3	2	4	7	8	¹¹ 6
2	4	6	¹⁵ 3	9	8	1	5
1	3	4	5	2	²² 6	7	9
³6	9	8	1	17	2	4	¹¹ 3
¹¹ 4	6	5	¹⁹ 7	1	¹ 9	2	8
8	1	2	4	3	5	¹⁷ 6	7
5	167	9	8	¹⁰ 6	4	3	1
	3 7 9 2 1 ³ 6 ¹ 4 8 5	3 2 7 28 9 5 2 4 1 3 36 9 4 6 8 1 5 7	3 *2 7 7 *8 *1 9 5 3 2 4 6 1 3 4 *6 9 8 *4 6 5 8 1 2 5 *7 9	3 2 7 79 7 28 16 6 9 5 3 2 2 4 6 53 1 3 4 5 36 9 8 1 14 6 5 7 8 1 2 4 5 7 9 8	3 *2 7 *9 *8 7 *8 *1 6 *5 9 5 3 2 4 2 4 6 *3 9 1 3 4 5 2 *6 9 8 1 *7 *4 6 5 *7 1 8 1 2 4 3 5 *7 9 8 *6	3 2 7 9 8 1 7 28 1 6 25 13 9 5 3 2 4 7 2 4 6 13 9 8 1 3 4 5 2 26 36 9 8 1 17 2 14 6 5 17 1 19 8 1 2 4 3 5 5 17 9 8 16 4	3 2 7 9 8 1 25 7 28 1 6 25 13 9 9 5 3 2 4 7 8 2 4 6 13 9 8 1 1 3 4 5 2 26 7 36 9 8 1 77 2 4 14 6 5 17 1 19 2 8 1 2 4 3 5 16 5 17 9 8 16 4 3

Thermo Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Starting at the "bulb," numbers placed along each marked thermometer must form a strictly 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	З
5	9	8	З	1	4	7	6	2
6	3	9	4	7	8	5	2	
7	2	5	1	9	6	3	4	8
8	4	1	2	3	5	6	7	9

points

points

Arrow Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The number placed in a cell with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows.

\bigcirc		\uparrow	7	Ł		\bigcirc	
4	K	8	6	Z	א		
7	R		\bigcirc		8	\downarrow	
1	2	\bigcirc	\square	Ο	9	7	
\uparrow	9		\bigcirc	$^{\prime}$	Ν	5	
	Ľ	Ľ	3	8	7	6	
Ó		\rightarrow	4	\leftarrow		0	

7	2	8	3	1	5	6	4	9
6	9	5	4	7	2	-	3	8
1	4	в	8	6	9	5	2	7
4	7	6	5	9	3	8	1	2
5	1	2	6	8	4	9	7	3
8	Ş	9	٢	2	۲	Þ	5	6
9	5	1	2	3	8	7	6	4
2	8	7	Ŷ	4	6	З	9	5
3	6	4	9	5	7	2	8	1

Classic Sudoku (×2)

$2 \times 20 \text{ points}$

Monday 11th August 2014, 10:35 - 11:20

45 minutes - total points

Odd-Even-Big-Small Sudoku

Rules: Place a number from 1-8 in each empty cell in the grid such that each row, column and marked 8-cell box contains each number exactly once. The clues outside the grid indicate that the first two cells in the corresponding direction must contain numbers matching the description.

 $Odd = \{1, 3, 5, 7\}; Even = \{2, 4, 6, 8\}; Big = \{5, 6, 7, 8\}; Small = \{1, 2, 3, 4\}.$



X-Sums Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate the sum of the first X numbers placed in the corresponding direction, where X is equal to the first number placed in that direction.



	1	10	18	15	20	33	35	36	45	
1	1	2	3	4	5	6	7	8	9	45
34	7	8	9	1	2	3	4	5	6	21
22	4	5	6	7	8	9	1	2	3	6
45	9	1	2	3	4	5	6	7	8	34
33	6	7	8	9	1	2	3	4	5	15
12	3	4	5	6	7	8	9	1	2	3
38	8	9	1	2	3	4	5	6	7	28
35	5	6	7	8	9	1	2	3	4	10
5	2	3	4	5	6	7	8	9	1	1
	7	8	17	30	30	36	38	45	1	-

points

Outside Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The numbers outside the grid must appear within the first three cells in the corresponding direction.



Next to 9 Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate the numbers to be placed in the cells before and after the cell containing 9 in the corresponding direction.



	4	3	3	1	1	1	-	2	
	7	6	5	8	4	3	8	4	6
78	1	4	5	6	2	8	9	7	3
23	6	2	9	3	4	7	8	1	5
15	8	7	3	5	9	1	2	6	4
15	3	8	6	4	1	9	5	2	7
68	7	1	4	2	5	3	6	8	9
5	9	5	2	8	7	6	З	4	1
18	4	6	1	9	8	5	7	3	2
57	5	9	7	1	3	2	4	9	6
5	2	3	8	7	6	4	1	5	8

Skyscrapers Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each number represents the height of a building. The clues outside the grid indicate the number of buildings visible from the corresponding direction. A taller building will hide any shorter buildings behind it.



Max Triplet Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate the maximum sum of any three consecutively placed numbers in the corresponding direction. This sum must be achieved at least once in that direction.



	18	21		_	19	17	_		23
	7	3	1	9	2	8	4	6	5
	6	2	9	7	4	5	1	3	8
18	5	8	4	1	6	3	7	2	9
	3	1	2	5	9	4	8	7	6
23	8	9	6	3	1	7	5	4	2
18	4	5	7	2	8	6	3	9	1
21	2	7	8	6	3	1	9	5	4
	1	6	3	4	5	9	2	8	7
20	9	4	5	8	7	2	6	1	3

Even Sandwich Sudoku

points

 Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate all numbers in the corresponding direction whose two neighbouring cells in that direction both contain even numbers.



Classic Sudoku (×2)

 $2 \times 20 \text{ points}$

Monday 11th August 2014, 11:40 - 12:25

45 minutes - total points

Consecutive Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Adjacent cells containing consecutive numbers are marked. Adjacent cells with no marking must not contain consecutive numbers.

7]	[]]	
]		3			8
] []	
	_]	2	
		[]				
	2]	
]					
8)		9]	
)]]	7

			_					
7	9[]8	5]6	4	2[] 1	3
2	4[]5	9	3	1	7	6	8
1	3	6]7[8	2	4	5	9
5	8	1	3	7]6	9	2	4
4	7	3	2	5	9	1	8	6
6	2	9	4	1	8	3	7	5
9	5]4	8	2	7	6	3	1
8	6]7	1	9	3	5	4	2
3	1 []2	6	4]5	8	9	7

Non-Consecutive Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in adjacent cells must not be consecutive.

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

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

No Nines Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in adjacent cells must not sum to 9.

3	5		2					
2				1			5	
1				6				
4			9					
	9	3				4	2	
					5			9
				5				1
	3			2				3
					9		6	2

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

Odd/Even Count Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. An even number placed in a cell with a circle indicates the number of even numbers placed in the surrounding 8 cells. An odd number placed in a cell with a circle indicates the number of odd numbers placed in the surrounding cells. Numbers placed in cells without a circle may have either of these properties.

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

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

Consecutive Sequences Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed along marked sequences must form an arithmetic progression whose common difference is 1.

	2	_			/		/	
								Ч
				8				
			1	2	9			
				7	/			
		$\left \right\rangle$						
3								
						-	8	

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

points

Inequality Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in adjacent cells must satisfy the given inequalities.

^		× ×	_v_		,,	;	> 	
	-^-	, 			_v_		_v_	
			^_	-	-v-			
~	^_	-^-	-^-		_v_		-^-	- ^ -
	v		;	>			;	 >
			v	_^_	~	_^_ 	_^_	<
						;	 >	

6	9 :	3	7	5 [;]	1	8	4	2
8	5,	2	6	4	3	1	9	7
1	7,	4	2	9	8	ъ	6	3
9	6	1	4	3.	7	2 ·	5	8
2	3	7	Ŝ	8	6	9	1	4
5	· 4	<u>8</u> .	<u>9</u>	1 ·	2	7	Ĵ.	6
4	2 ·	5	8	6	9	3	7 *	1
7	1	ê	3	2	5	4	8.	9
Š	8	9	ĺ	7	4	6	2	5

XV Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Adjacent cells containing numbers summing to 5 are marked with a "V"; adjacent cells containing numbers summing to 10 are marked with an "X". Adjacent cells with no marking must not contain numbers summing to 5 or 10.

				x	_x_	``	/	
)	<u>`</u> 3		1				Ly_	
\ \	 / 	2			,	l (^	
١	2		9					
		>	l (- • -				
Ņ	/			~	2 '	l K	9	
			_^- /	_^_	9		8,	-v- <
		- v -	~)	3)	< (
			[^^- 		Ņ	ĺ		

5	6	9	7	8	4	2	/3	1
7,	٤3	8	1	2	ô	9	4	5
4	<i>י</i> 1	2	5	9	3,	¢7	ô	8
3 \	2 (6	9	4	8	1	5	7
8	9	7,	3	ľ	5	6	2	4
1 \	4	5	6	7	2,	8	9	3
6	7	<u>۱</u> ،	γÂ	ŝ	9	5	8,	٢Ž
2	5	Å	8	6	7,	3	1,	<u>،</u> 9
9	8	3 \	γ2̂	5	1	4	7	6

Kropki Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Adjacent cells containing consecutive numbers are marked with a white dot. Adjacent cells containing numbers whose ratio is 2 are marked with a black dot. Adjacent cells with no marking must not contain numbers that are neither consecutive nor whose ratio is 2. Adjacent cells containing 1 and 2 can be marked by a dot of either colour.



6	2	4	7	9	3	8	1	5
3	Ĭ	8	5	4	6	7	2	9
5	7	9	8	1	2	4	3•	•6
7	4	6	•3°	2	9	1	5	8
8	9	2	4	5	1	6	7	S
1	5	3 ·	•6°	ן קלק	8	9	4	•Ž
9	6	1	2	3	4	5	8	7
4	3	5	9	8	7	2	6	1
2	8	7	1	6	5) М	9	4

Classic Sudoku (×2)

$2 \times 20 \text{ points}$

Monday 11th August 2014, 14:30 - 15:15

45 minutes - total points

Killer Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.



² 6	3	°2	7	¹ 9	°8	1	²5	4
4	7	² 8	¹⁶ 1	6	² 5	¹ 3	9	2
⁸ 1	9	5	3	2	4	7	8	¹¹ 6
7	2	4	6	¹⁵ 3	9	8	1	5
¹² 8	1	3	4	5	2	²² 6	7	9
[°] 5	³6	9	8	1	17	2	4	¹¹ 3
3	¹¹ 4	6	5	¹⁹ 7	1	¹⁶ 9	2	8
²⁴ 9	8	1	2	4	3	5	¹⁷ 6	7
2	5	¹⁶ 7	9	8	¹⁰ 6	4	3	1

Arrow Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The number placed in a cell with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows.

\bigcirc		\uparrow	7	Ļ		Ó	
4	Z	8	6	↗	7		
7	Л	/	\bigcirc		8	\leftarrow	
1	2	\bigcirc	\square	Q	9	7	
\uparrow	9		\bigcirc	\nearrow	א	5	
	Ľ	Ľ	3	8	7	6	
\bigcirc		\rightarrow	4	\leftarrow		\bigcirc	

-	0			4	F	~	4	
/	2	8	3		5	6	4	9
6	9	5	4	7	2	1	3	8
1	4	В	8	6	9	5	2	7
4	7	6	5	9	3	8	1	2
5	1	2	6	8	4	9	7	3
8	3	9	٢	2	۲	4	5	6
9	5	1	2	3	8	7	6	4
2	8	7	€	4	6	3	9	5
3	6	4	9	5	7	2	8	1

Star Product Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate the product of the numbers to be placed in cells containing stars.



16	24	60	168	63	54	240	30	20	_
2	7	6	5	9	4	1	8	3	18
5	\$	4	¥	3	8	9	6	2	28
3	8	9	6	2	1	S	4	7	240
9	3	5	4	6	7	2	1	8	60
8	6	2	9	\$	5	3	7	4	32
7	4	1	2	8	3	6	5	9	90
6	5	3	8	4	9	7	2	1	54
4	9	7	1	5	2	8	3	6	48
1	2	8	3	¥	6	4	9	5	35

Little Killer Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues outside the grid indicate the sum of the numbers contained in the cells in the direction of the corresponding arrow.



	, ³	17	18	21	× ⁸			
3	9	7	8	1	2	6	5	4
8	6	2	3	5	4	1	9	7
5	4	1	7	6	9	2	3	8
7	2	8	6	4	5	9	1	3
1	5	9	2	3	8	7	4	6
4	3	6	9	7	1	5	8	2
6	1	4	5	8	7	3	2	9
9	8	3	1	2	6	4	7	5
2	7	5	4	9	3	8	6	1
			32	11	24	11	1	

Equality Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Rows and columns must satisfy the given equations of 3 digit numbers when read from left-to-right or from top to bottom.



Diagonal-Arrow Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The number placed in a cell with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows. Each marked diagonal must also contain each number from 1-9 exactly once.

\leftarrow		\bigcirc		\bigcirc	9	4	\bigcirc	
8		\rightarrow	\rightarrow	Г	\bigcirc	\bigcirc		\uparrow
	\bigcirc	· · ·	8		\leftarrow			
	Q	¢	<i></i> [R	3	\bigcirc	\bigcirc
		\rightarrow	9	\odot	7			\bigcirc
Q	Ó	7	*		```.	\leftarrow		\bigcirc
	\geq		\mathcal{F}	ד	5	``\.	\leftarrow	
Z	1	Ø	Ζ	\bigcirc		\bigcirc	1	3
\bigcirc		3	2					\odot

4	5	6	3	7	9	4	8	2
8	7	-2	4	5	6	9	3	\uparrow
3	9	4	8	\downarrow	2	1	5	6
4	6	¢	þ	2	8	3	9	7
2	3	5	9	6	7	Y	4	8
9	8	7	K	4	3	2	6	5
6	2	9	7	3	5	8	¢	4
Z	4	8	6	9	1	5	2	3
5	1	3	2	8	4	6	7	9

Calcudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The numbers placed in each marked cage must add, subtract, multiply or divide to give the total given in its top-left. In the case of subtraction or division, the operation is applied successively to all numbers in the cage, starting with the largest number. Numbers must not repeat in cages.

35	0			4	10		1	
	6	24				27		84
48			15	5		6		
	18	6		24	3			
						72	1	
216		42			15			3
	2		2			5	2	
	14		1		126			45
2		9						

3⁵5	°1	9	3	⁴ 2	¹⁰ 6	4	¹ 7	8
7	⁶ 2	²⁴ 4	5	1	8	²⁷ 3	9	8⁴6
⁴ 8	3	6	¹⁵7	⁵9	4	⁶ 1	5	2
6	¹⁸ 9	⁶ 3	8	²⁴ 4	^³ 2	5	1	7
4	5	2	1	7	9	⁷² 8	¹ 6	3
²¹⁶	8	⁴² 7	6	3	15	9	2	^³ 4
9	² 7	5	² 4	6	3	⁵2	² 8	1
3	¹ 6	8	¹ 2	5	¹²⁶	7	4	⁴⁵ 9
² 2	4	⁹ 1	9	8	7	6	3	5

Classic Sudoku (×2)

$2 \times 20 \text{ points}$

Monday 11th August 2014, 15:35 - 16:20

45 minutes - total points

Isometric Sudoku

points

points

Rules: Place a number from 1-8 in each empty cell in the grid such that each generalised row, and marked 8-cell region contains each number exactly once. Note that generalised rows pass through parallel edges of adjacent cells.



Parquet Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Note that some cells are contained in multiple rows and/or columns.

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

2		9	6	8	3		5	1		4	7
			4	9	6	2				>	8
7						כ	2	5)	
3	5		8	4		1	7	2	6		9
8	3		5	7		4	1	6	9		2
1		1			6	ר	6	З	C	>	
		ŧ	7	2		2			C)	5
6		2	9	5	8		3	7		1	4
9		6	2	3	5		8	4		7	1
	-	7	1	6	•	כ			C	-	3
4					4	_	9	8)	
5	8		3	1		7	4	9	2		6

Irregular Sudoku

points

Rules: 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.

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

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

Hex Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each generalised row and marked 3×3 region contains each number at most once. Note that generalised rows pass through parallel edges of adjacent cells in three possible directions.



Sudokurve

points

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each generalised row, and marked 3×3 box contains each number exactly once. Generalised rows are indicated by curved lines in the grid.



points

points

Toroidal Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Some marked regions wrap across the grid from left to right and/or from top to bottom.

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

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

Ten Box Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Some marked regions wrap across the grid from left to right and/or from top to bottom. No number should be placed in blackened cells.

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

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

Classic Sudoku (×2)

2×20 points

Round 7 - Team

Monday 11th August 2014, 16:50 - 17:20

30 minutes - total points

(Instructions will be published in the next version.)

Round 8 - Team

Monday 11th August 2014, 17:30 - 18:00

30 minutes - total points

(Instructions will be published in the next version.)

Round 9

Tuesday 12th August 2014, 09:30 - 11:00

90 minutes - total points

Windoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each of the four shaded 3×3 regions must also contain each number from 1-9 exactly once.

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

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

points

points

Diagonal Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each marked diagonal must also contain each number from 1-9 exactly once.

· · · ·					3	8		
				4	7			
6				2				
8	9							
	2	З				7	8	
							3	6
				3		```.		4
			1	6			· · ·	
		7	8					

2	5	9	6	1	3	8	4	7
3	8	1	9	4	7	2	6	5
6	7	4	5	2	8	9	1	З
8	9	6	3	7	1	4	5	2
1	2	3	4	5	6	7	8	9
7	4	5	2	8	9	1	3	6
5	1	8	7	3	2	6	9	4
9	3	2	1	6	4	5	7.	8
4	6	7	8	9	5	3	2	کبر ا

Anti-Knight Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in cells related by a chess Knight's move must be different.

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

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

Palindrome Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed along marked lines must form a palindromic sequence, e.g. 1234321.

					7	9		
	2	8				7	6	
	6	Г			_	/	8	3
			1					8
				4				
3					2			
4	8	$\overline{\ }$	-				9	
	9	3			_	8	1	
		6	3					

1	3	5	8	6	7	9	2	4
9	2	8	4	3	Б	7	6	1
7	6	4	ე	2	1	ы	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	Z	2	1	6	3	9	5
2	9	3	7	5	-4	8	1	6
5	1	6	3	9	8	4	7	2

Renban Groups Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The numbers placed in each shaded region must form a consecutive, non-repeating set.

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

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

Anti-Diagonal Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Each marked diagonal must contain exactly three different numbers.

``\.		6				3		,
			4		3			
1				5		,		9
	4		```.				2	
9		2				8		7
	6				, , , , , , , , , , , , , , , , , , ,		5	
5		, , , , , , , , , , , , , , , , , , ,		6		``\.		2
			9		8			
		3				1		Ì.,

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

Search 9 Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Some arrows are marked in the grid. If a number *n* is placed in a cell containing an arrow, then a 9 must be placed in the *n*th cell in the corresponding direction.

		$\overline{\mathbf{v}}$					4
	\bigcirc				Ş		
	4				6	$\overline{\Box}$	
$ \Rightarrow$		4					$\hat{\mathbf{T}}$
			3				
\Rightarrow				1			\bigtriangledown
	8				1	\bigtriangledown	
					$\widehat{1}$		
1		$\widehat{\mathbf{T}}$		$\widehat{\mathbf{T}}$			

9	2	1	5	7	6	3	8	4
5	6	3	8	9	4	?	1	7
8		4	2	1	3	6	5	9
6	5	7	4	2	8	9	3	ţ
4	1	9	7	3	5	8	6	2
3	8	2	9	6	1	7	4	\$
7	4	8	6	5	9	1	2	3
2	3	5	1	8	7	4	9	6
1	9	6	3	4	2	5	7	8

points

points

Consecutive Circles Sudoku

points

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed along marked circles must form an arithmetic progression whose common difference is 1.

		2					
(7	1		2	
			1				\mathcal{I}
	9	0					
						6	
				5			
	3		J	8	(
					7		

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

Cylindrical Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Some marked regions wrap across the grid from left to right and/or from top to bottom.

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

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

Between Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The values of the numbers placed along marked lines must be strictly between the two numbers placed in the corresponding circles.

		7			9			2
	4	\bigcirc		2		\geq		
3			7		\bigcirc	5	\bigcirc	
		6		\sim				9
	5			4	\bigcirc		3	0
2						7		
\bigcirc		2		/	1	\bigcirc		3
	\bigcirc			7			6	
6			3			1		\bigcirc

8	6	7	4	5	9	3	1	2
5	4		6	2	3	8	9	7
3	2	9	7	1	8	5	4	6
7	3	6	1	8	5	4	2	9
9	5	8	2	4	7	6	3	\bigcirc
2	1	4	9	3	6	7	8	5
4	7	2	8	6	1	9	-5	3
1	9	3	5	7	4	2	6	8
6	8	5	3	9	2	1	7	4

Clone Sudoku

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. 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	З	4	2	9	7	1
9	2	3	8	7	4	6	1	5
5	7	1	2	9	6	8	4	З
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

Eliminate Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in cells with arrows must not repeat in the corresponding direction.

\searrow			\searrow		
\sum	\sum				
\sum	\sum				
			1	2	3
				3	4
		4			5

6	2	3	5	4	1
ঠ	4	1	З	6	2
Ì	Ś	2	4	5	6
4	5	6	1	2	3
2	1	5	6	3	4
3	6	4	2	1	5

Hex Sudoku

points

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Place a number from 1-9 in each empty cell in the grid such that each generalised row and marked 3×3 region contains each number at most once. Note that generalised rows pass through parallel edges of adjacent cells in three possible directions.



Quad Max Difference Sudoku

points

points

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. The clues marked at the intersection of a 2×2 block of cells indicate the maximum difference between numbers placed in these blocks. This difference must be realised.

5			7		(-		2	3
		1		()(
	7					8		
9					G			
				1			y	
C		9–0			(.			1
		7	G				5	
						4		
2		s)—(4	•)— 		6			8

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

No Touch Sudoku

Rules: Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once. Numbers placed in cells that meet diagonally at a point must be different.

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

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

Classic Sudoku (×2)

$2 \times 20 \text{ points}$

Tuesday 12th August 2014, 11:20 - 11:40

20 minutes - 100 total points

Overlapping Scattered Sudoku

100 points

Rules: Place a number from 1-9 in each empty cell in the two overlapping grids such that each row, column and marked 9-cell region contains each number exactly once. The 9 shaded cells should collectively be viewed as a 9-cell region.

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

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

Round 11 - Team

Monday 11th August 2014, 12:10 - 12:55

45 minutes - total points

(Instructions will be published in the next version.)

Play-offs

Tuesday 12th August 2014, 15:00 -

The lists of puzzles for the three rounds of the play-offs, in order, are as follows:

Play-off 1

- Diagonal Sudoku
- Thermo Sudoku
- Classic Sudoku

Play-off 2

- Arrow Sudoku
- Diagonal Sudoku
- Irregular Sudoku
- Classic Sudoku

Play-off 3

- Outside Sudoku
- Non-Consecutive Sudoku
- Diagonal Sudoku
- Irregular Sudoku
- Classic Sudoku