

Instruction Booklet for the 6th World Sudoku Championship

**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

PART 1-13

7-8 November,
Monday–Tuesday

Total solving time
400 + 140 minutes

Maximum score:
???? points

6th WSC

Wrong Puzzles?	10:40–11:00
Sudoku pieces	11:10–11:40
Easy Classics	13:40–14:25
Halved Squares Sudoku	14:30–15:10
Sudoku – central clues	15:25–16:05
Circle Sudoku (TEAM)	16:55–17:35
Vasarely Sudoku (TEAM)	17:50–18:30

Decorated Sudoku	09:00–10:00
Sprint	10:05–10:35
Sudoku mix	10:50–11:50
Not Easy Classics	13:50–14:35
3D Sudoku	14:45–15:15
Weakest link (TEAM)	16:05–17:05
Playoff	18:15–19:15

General scoring rules for WSC

Partial scores are not generally available for Sudoku puzzles, unless explicitly stated otherwise. That is, if a puzzle is marked correct, the full score is awarded, otherwise no points are scored.

Scoring Puzzles

For some puzzles (especially smaller grids and Sprint puzzles), we will not be using the concept of a Scoring Area. For these puzzles, 100% accuracy in the grid is required for points to be awarded.

For the majority of the puzzles, we will be using the Scoring Area concept, as described here. After solving a puzzle, the contestant will copy the two indicated rows (or the equivalent) of the grid into the Scoring Area at the bottom on the page. Only the entry in the Scoring Area will be judged for 100% accuracy. Even if the grid is not completely filled in (at least 90% correct), you will still get full credit for a correct answer.

To get full credit for a puzzle, one of the following must be true:

- The Scoring Area is correct and the grid is filled at least 90% correctly; or
- The Scoring Area is empty, and the grid is 100% correct.

If the Scoring Area is correct but less than 90% of the grid is filled, you will get full credit if the judge believes that you made an honest attempt to solve the puzzle and fill the grid sufficiently.

Round Bonus

For individual and team rounds, a competitor or team can earn a bonus if they complete all the puzzles in the round before the time limit. The competitor declares by raising his or her hand to get the attention of a floor judge, who will write the time on the scoring cover sheet. For individual rounds, the full bonus is 5 points for each full minute early (for example, 50 seconds early would not get any bonus). For team rounds, the full bonus is 30 points for each full minute early. To get the full bonus, all puzzles must be perfectly solved.

If, in the opinion of the judge, the individual or team intended to submit a perfect round, but there is a small number of errors, the round could be considered "near-perfect" and the individual or team would be awarded 60% of the full bonus. In general, a round would be near-perfect if each puzzle in the round was at least 95% correct, in the opinion of the judge.

**6th World Sudoku
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6-10 November 2011



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8-13 November 2011

Individual part

Part 1 Wrong Puzzles?

10:40–11:00
20 minutes – ??? points

You will be given a handful of Sudoku puzzles that are already solved. Your task is to find out if those solutions are correct.

For each puzzle, you need to clearly indicate whether you think the solution is correct or wrong. You should circle one of the signs provided next to each puzzle. There is no need to point out any error in the puzzles you mark wrong.

Scoring:

Correct solution marked correct: 4 points
Wrong solution marked wrong: 2 points
Puzzles without any mark: 0 points

Wrong solution marked correct: -2 points
Correct solution marked wrong: -4 points

If the total score is less than zero, then zero points will be awarded (i.e. nobody will finish the round with a negative score).

Puzzles will consist of Standard, Diagonal and Amorphous Sudokus, with their sizes ranging between 6x6 and 12x12.

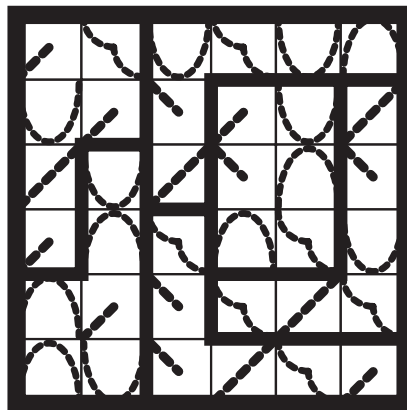
**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

This is a manipulative Sudoku puzzle where small pieces with pictures are to be used instead of numbers. Standard Sudoku rules apply. In addition, some pieces are already placed into the puzzle grid. None of these pieces is at the right place. However, for any piece placed into the puzzle, at least one of its (at most) four edge adjacent neighbour cells must contain the same piece in the solution as the cell itself has in the puzzle grid.



E.g. in the sample puzzle, row 2, column 6 of the puzzle grid has a shape similar to a forward slash. This implies that in the solution grid, at least one of the neighbours of the same cell must contain the similar shape.

Partial scoring is available in this round, depending on the number of correctly placed pieces: up to 21: 0 points, between 22-80: (number of correctly placed pieces - 21) * 3, 81: full score (180 points).

Any piece that is placed onto the grid but is incorrect, results in a deduction of 3 points (in other words, the number of correctly placed pieces will be reduced by the number of incorrectly placed pieces for the scoring purposes). If the total score is less than zero, then zero points will be awarded (i.e. nobody will finish the round with a negative score).

No pencil, eraser or other marker is allowed in this round. Individual name stickers will be provided prior to this round, competitors are kindly requested to bring it along and use them to label their solution sheets just before this round starts.

Part 2 Sudoku pieces

11:10–11:40
30 minutes – 180 points

**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

Fill in the grid so that each row, column and region contains each number between 1-9 exactly once (1-6 in the small grids).

There will be 6 times 6x6 and 16 times 9x9 grids.

Part 3 Easy classics

13:40–14:25
45 minutes – 580 points

10
points

10
points

20
points

20
points

25
points

25
points

25
points

30
points

30
points

30
points

30
points

35
points

35
points

40
points

40
points

40
points

45
points

50
points

10
points

10
points

10
points

10
points

**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

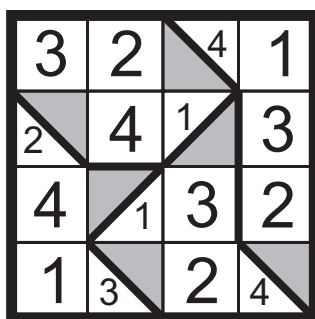
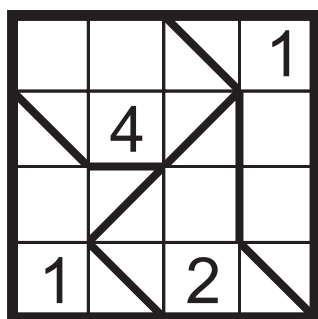
Individual part

Part 4 Halved squares sudoku

14:30–15:10
40 minutes – 370 points

In this variation, 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.

Using definitions above, standard Amorphous Sudoku rules apply:
each row, column and area contains each number exactly once.



10 points	10 points	25 points
40 points	50 points	50 points
50 points	55 points	80 points

**6th World Sudoku
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6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

Part 5 Sudoku – central clues

15:25–16:05
40 minutes – 480 points

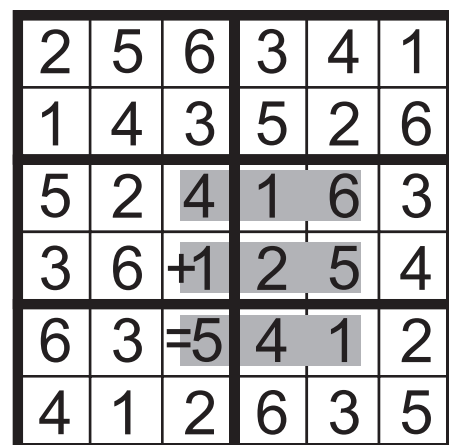
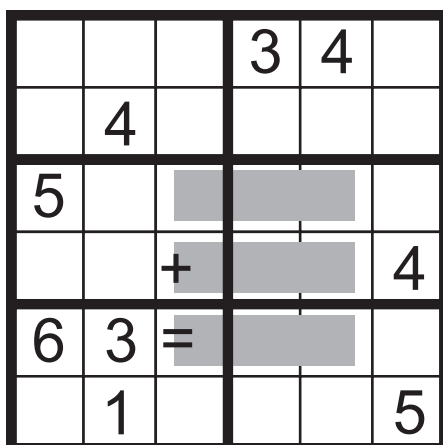
In all these puzzles, beyond standard Sudoku rules,
there are some extra rules constraining the cells around the centre of the puzzle.

Puzzle 1

Sum in the centre

Standard Sudoku rules apply. In addition, the three highlighted grey regions (read as multiple-digit numbers) need to be filled in such that the sum of the top two equals to the third one.

40 points	50 points
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Puzzle2

Only Five in the centre

Standard Sudoku rules apply. Additionally, the grey region can only contain five different numbers. Grey cells belonging to a marked diagonal also contain different numbers.

sample uses 3 different numbers (not 5)

40
points

45
points

	2				3
1		5			
					6
		4			

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

Puzzle3

Primes in the centre

Standard Sudoku rules apply. In addition, all numbers, of any length, that can be read in grey cells (across or down) are primes.

Sample uses numbers 1-5, 7.

40
points

50
points

					7
5		1			
	4				
					3
			2		
			7		

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

Puzzle 4

Renban Sudoku

Standard Sudoku rules apply. Additionally, edge connected grey cell groups contain a set of consecutive numbers. E.g. a group of five grey cells may contain 3-4-5-6-7, in any order.

40
points

50
points

	2		6		
					4
	1				
		3			5

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

Puzzle 5

Magic square in the centre

Standard Sudoku rules apply. In addition, the highlighted grey area is a magic square: each grey row/column of length 5 adds up to 25 and each grey row/column of length 3 adds up to 15. *(In the example: length 3 rows add up to 10, length 2 rows add up to 7)*

30
points

	2				3
				1	
4					
1			5		

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

Puzzle 6

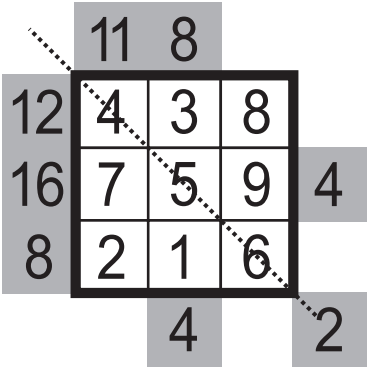
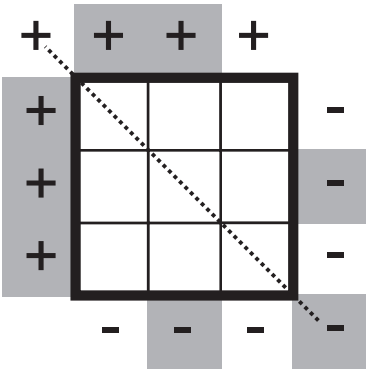
Plus-minus in the centre

Standard Sudoku rules apply. Additionally, the middle 3x3 region and the grey cells surrounding it form a Plus-minus puzzle. That is, any grey cell above and/or left to the middle box indicates the largest twofold sum in the row/column/diagonal of that box, while any grey cell below and/or right to the middle box indicates the largest twofold sum in the row/column/diagonal of that box. If a "largest twofold sum" is shown to be between 1 and 5, add 10 to obtain the true value, i.e. 11-15. A separate grid is shown here to explain the Plus-minus concept. However, no extra grid will be provided in the competition puzzle. Note that the top right and bottom left cells of the middle 5x5 square will not be grey.

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

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

55
points



Puzzle 7

Product in the centre

Standard Sudoku rules apply. In addition, the three highlighted grey regions (read as multiple-digit numbers) need to be filled in such that the product of the top two equals to the third one. Numbers in grey cells are all different.

40
points

1			6		
	4				2
		x			
	=			5	
5					

1	5	2	6	4	3
6	4	3	5	1	2
4	6	1	3	2	5
2	3	x5	4	6	1
3	=1	6	2	5	4
5	2	4	1	3	6

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Team part

Part 6 Circle sudoku

16:55–17:35
40 minutes – 1200 points

This round consists of eight Sudoku puzzles (four classic and four variations, details below). The puzzles are linked as follows.

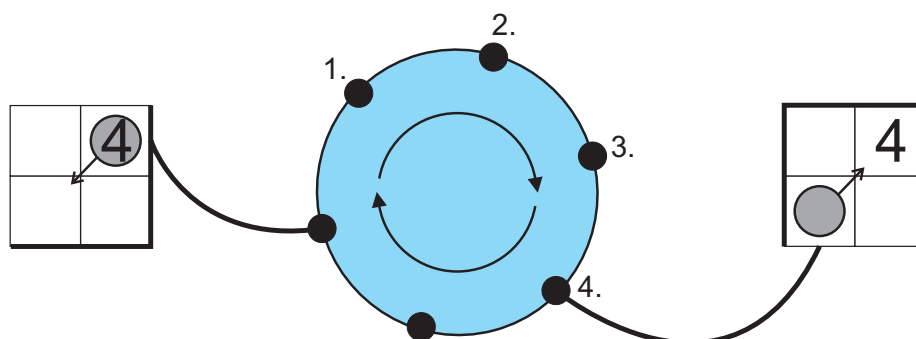
Each puzzle has several grey cells (ignore their arrows for now), these numbers can be transferred into another puzzle. Once such a grey cell is filled with a digit, start from that grey cell and follow the path along the lines into the wheel system. Once arrived at a wheel, start counting the nodes clockwise (also indicated by arrows) around the wheel. Count as many nodes as the digit in the starting grey cell, then leave the wheel at the node where the counting ends (for larger numbers, this may need to count around the wheel, e.g. if it has 6 nodes and you are carrying an 8, you will make a full round, then two more nodes). Follow that path

again. If you arrive at another wheel, repeat the same. If you arrive at a puzzle, there will be another grey cell having an arrow. Put the digit you carried into the cell this arrow is pointing at. See the figure below for a visual explanation.

Some of the number transfers may only pass through a single wheel; some others may visit more of them.

Some of the Sudoku puzzles have a unique solution even without using transferred clues, other puzzles may require the clues to unfold. The puzzles will be easy to recognise as their names are clearly indicated.

Partial scores are available for this round. Each of the Sudoku puzzles, if solved correctly, will score separately.



Puzzle 1

Hi-Lo Frame Sudoku

Standard Sudoku rules apply. Additionally, numbers outside the grid denote the sum of the largest and smallest digits out of the first three seen in that row/column from that direction.

Puzzle 2

Masked Product Sudoku

Standard Sudoku rules apply. Additionally, numbers in circles indicate the product of the digits surrounding them. Unfortunately, some of the digits in these products are masked. Each placeholder in these clues masks a single digit. Product clues cannot start with digit zero.

Puzzle 3

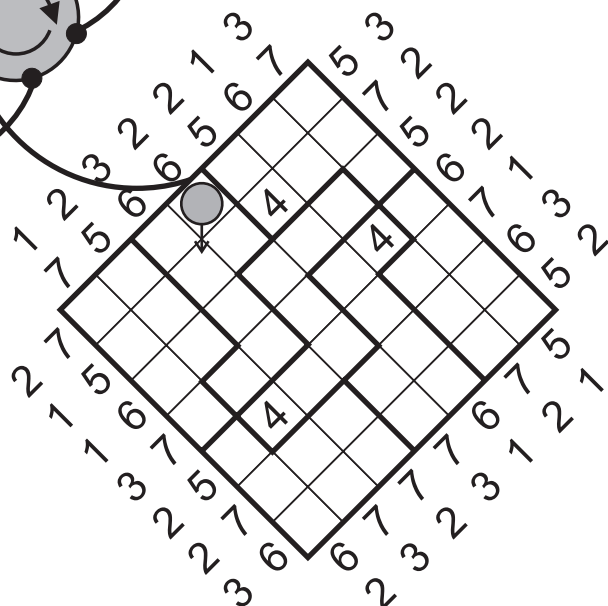
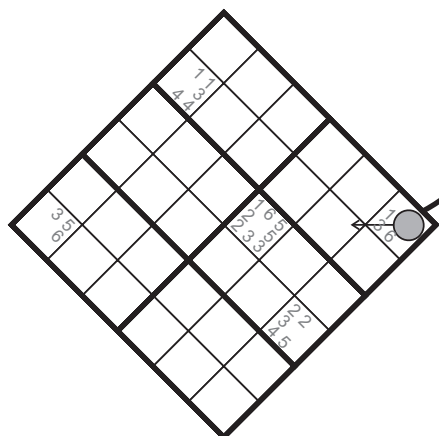
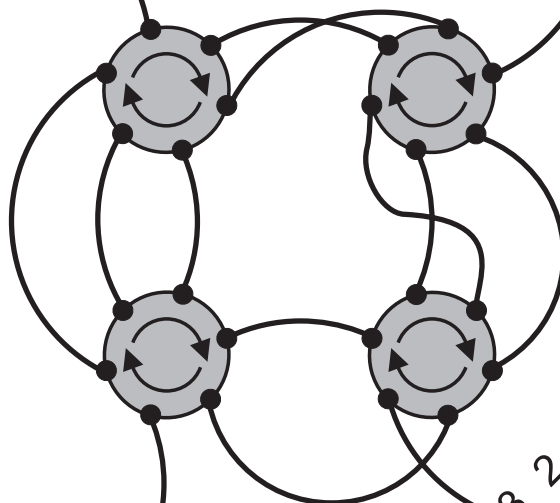
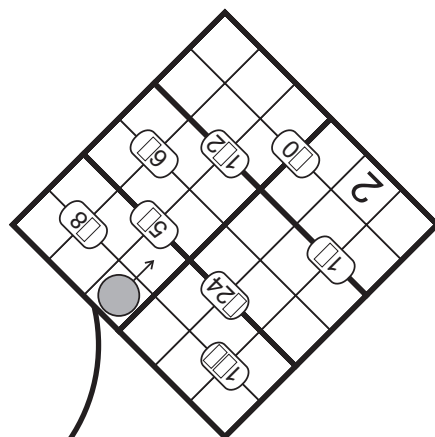
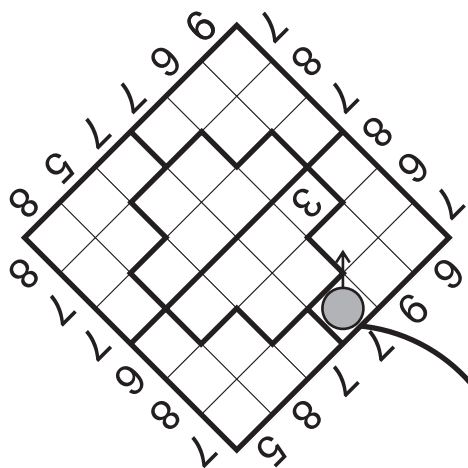
Easy as 123/789 Sudoku

Standard Sudoku rules apply. Additionally, digits 1-3 and digits 7-9, along with the clues outside, constitute two "Easy as ..." puzzles. That is, digits 1-3 outside indicate which of them appears first in that row/column from that direction, and the same applies for digits 7-9.

Puzzle 4

Neighbours' Party Sudoku

Standard Sudoku rules apply. Additionally, some cells contain the list of digits in their neighbouring cells (those sharing at least a corner).



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

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

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

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

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Part 7 Vasarely sudoku

17:50–18:30
40 minutes – 1200 points

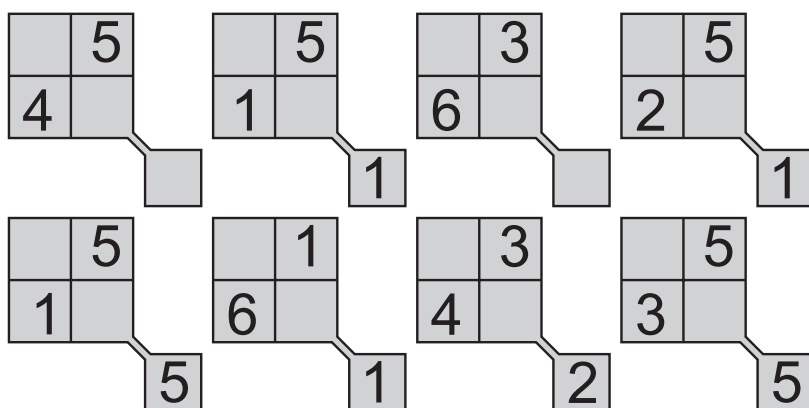
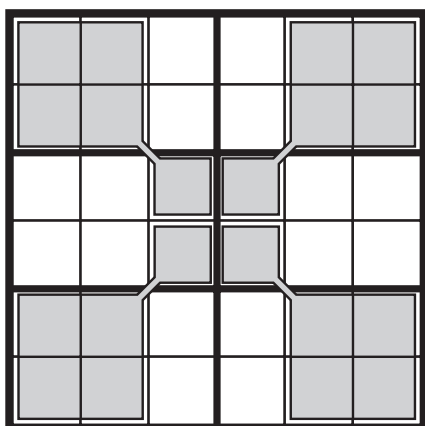
Team part

Place the given pieces into the diagrams as shown in sample in a way that a regular sudoku puzzle is formed in each diagram. The placement of a piece must be such that its “handle” covers one cell from the central region of the main grid, while its “plate” must cover one of the outer regions. Pieces can be rotated, but not reflected. Solve the sudoku puzzles.

Partial scores are available, in case single puzzles are solved correctly and that correct solution is a part of the solution of the entire puzzle.

			4		
		4			
2				4	
	6				1
			1		
		2			

		3			
		4			
	2				6
4				2	
			2		
			6		



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

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



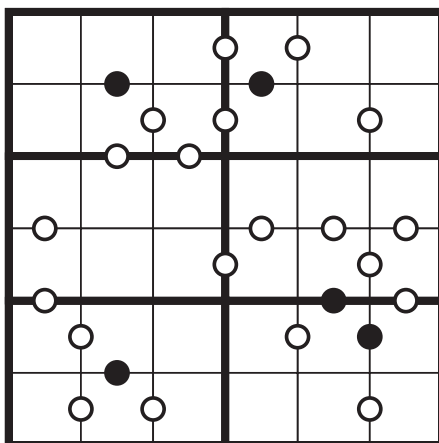
**Part 8
Decorated Sudoku**

09:00–10:00
60 minutes – 635 points

Individual part

Puzzle 1 – Kropki

Standard Sudoku rules apply. All edge adjacent cells containing digits with difference 1 are marked with a white circle. All edge adjacent grid cells with one of the digits being twice the other are marked with a black circle. Neighbouring cells containing 1 and 2 may be marked with either a white circle or a black one. All available circles are given.

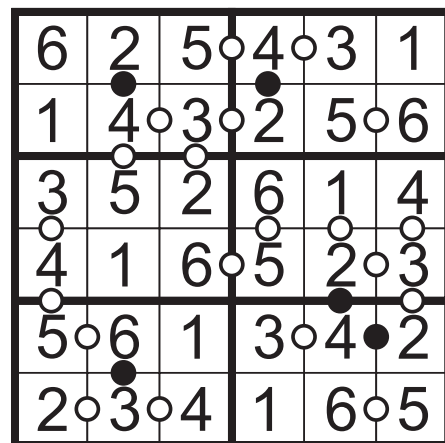


40

points

70

points



Puzzle 2 – XXV Sudoku

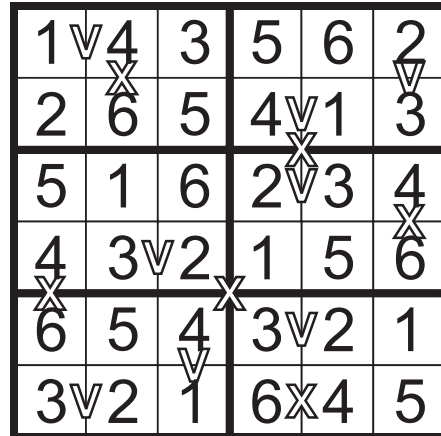
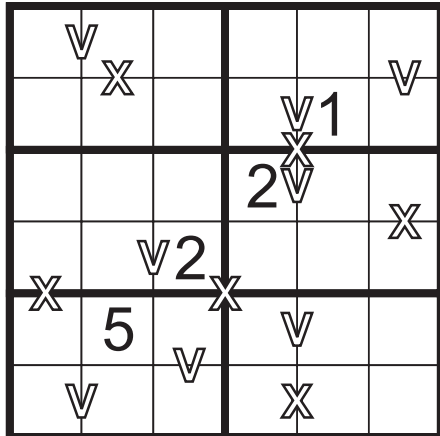
Standard Sudoku rules apply. Adjacent cells totalling 10 or 5 are marked with X and V on the edge they share, respectively. Additionally, four cells around a vertex totalling 10 are marked with X on the corner they share. All available X and V clues are given.

40

points

70

points



Puzzle 3

Square Numbers Sudoku

Standard Sudoku rules apply. All two or three digits square number that can be read across or down are marked. A list of available square numbers is attached (i.e. those without zero and digit repetition).

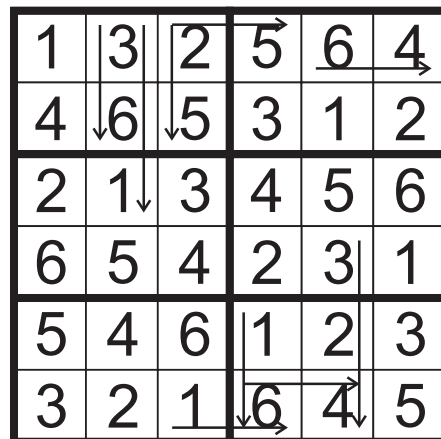
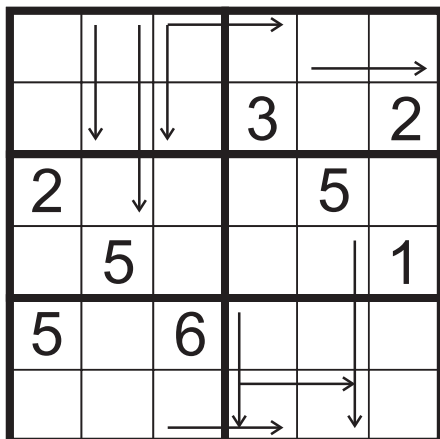
16, 25, 36, 64,
256, 324,
361, 625.

65

points

100

points

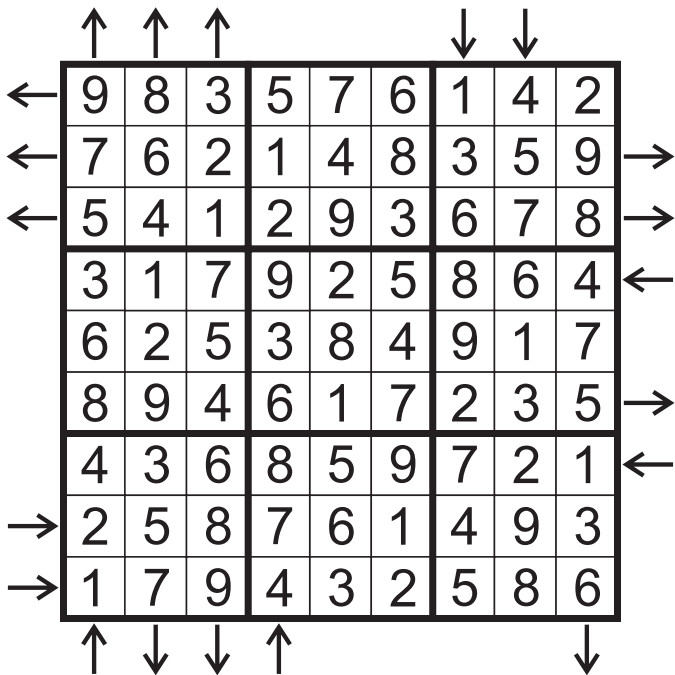
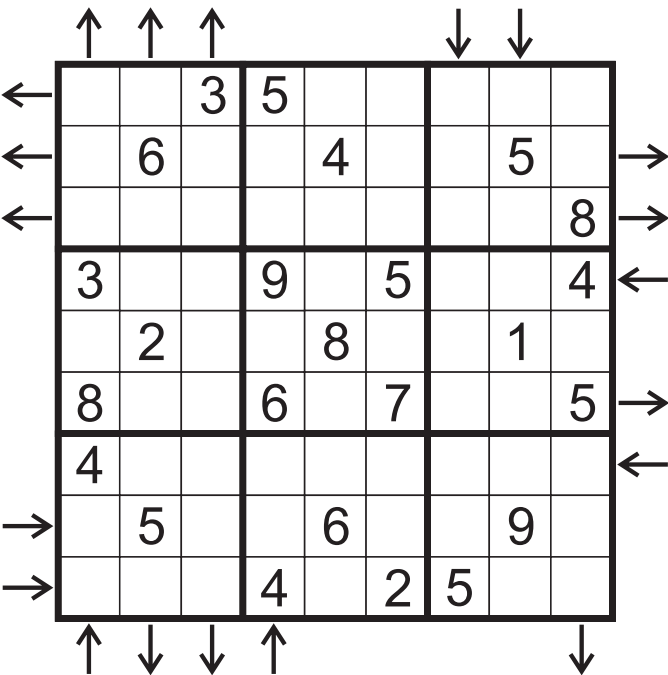


Puzzle 4 – Rossini Sudoku

40
points

Standard Sudoku rules apply.
The arrows indicate that the nearest three digits in the row (column) are in ascending or descending order (increasing towards the direction the arrow is pointing towards).
If there is no arrow outside a row/column, the nearest 3 digits therein cannot be in either ascending or descending order.

100
points

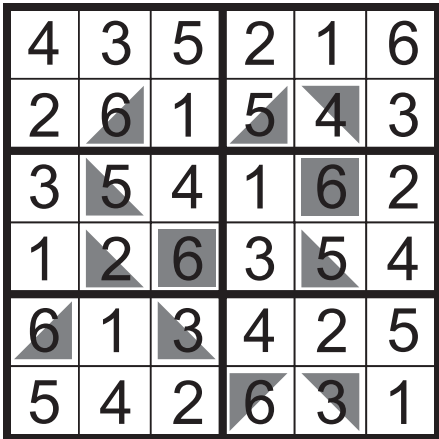
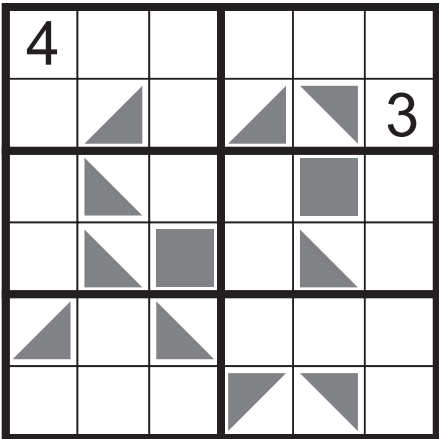


Puzzle 5
Triangle Sums Sudoku

Standard Sudoku rules apply. A cell that equals to the sum of two of its diagonally touching neighbours is marked with a grey right triangle, with its legs facing towards the two neighbours.
Whenever a cell contains two such triangles, the resulting grey square is shown. In this case, it is part of the puzzle to figure out which are the triangles that made up for that square.
All available triangles (and squares) are given.

40
points

70
points



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Individual part

In this sprint round there will be:

- 6 pieces of 6x6 classic
- 6 pieces of 9x9 classic
- 3 pieces of 9x9 diagonally
- 3 pieces of Amorphous sudokus (6x6 and 8x8).

10 points	10 points	10 points	10 points	10 points	10 points
20 points	25 points	25 points	25 points	30 points	30 points
25 points	30 points	35 points	15 points	15 points	25 points

Part 9 Sprint

10:05–10:35
30 minutes – 360 points

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**20th World Puzzle
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8-13 November 2011

Individual part

Part 10 Sudoku mix

10:50–11:50
60 minutes – 940 points

Puzzle 1 – Sudoku 10-20-30

Standard Sudoku rules apply. Additionally, the sum of any grey region equals to 10, 20 or 30.

35 points	40 points
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				4		7		
			7				5	
					3			4
8						1		
	2		8					
		7			5			
6								8
	1	2						3
				7			1	

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

Puzzle 2

Sudoku – odd/even regions

Standard Sudoku rules apply. Additionally, any three horizontally, vertically or diagonally consecutive cells containing digits of identical parity (i.e. all three odds or all three evens) are marked with a grey line.

15
points

25
points

			5		
	6			3	
2					
					1
	2			4	
		1			

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

Puzzle 3

Sudoku wordsearch

Standard Sudoku rules apply. In addition, the “words” given can be read in the puzzle in one of the eight directions (horizontally, vertically or diagonally).

“Words” in the example:
664, 2222, 3254.

35
points

6					
				5	
		4			
					3

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

Puzzle 4 – Tetris Sudoku

Fill some cells with digits 1 through 5 (1 through 3 in the example) so that each row, column and region contains each of them exactly once. In every region, the cells that remain empty need to be connected.

25
points

40
points

		1			
				3	
	1		3		
3				1	

2	3	1			
			2	3	1
	1	2	3		
		3	1	2	
3				1	2
1	2				3

Puzzle 5 – Palindrome Sudoku

Standard Sudoku rules apply. In addition, cells along any grey stripe need to be palindrome. That is, the sequence of numbers along the strip must be symmetric.

15
points

40
points

	1		
		3	
	2		

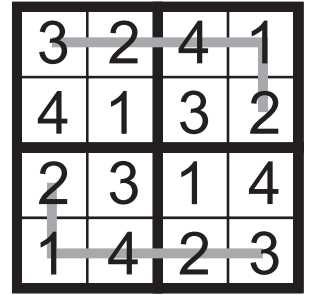
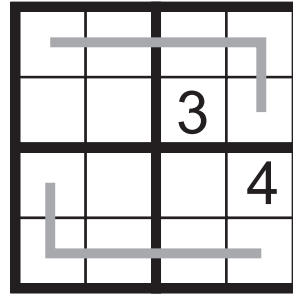
3	1	2	4
2	4	3	1
4	3	1	2
1	2	4	3

Puzzle 6 – Alternating stripes

Standard Sudoku rules apply. Additionally, “large” and “small” numbers alternate along the grey stripes. A “large” number is larger than its two neighbours, while “small” numbers are smaller than theirs. Whether the numbers in the starting or ending cells are “small” or “large” is not specified.

15
points

55
points

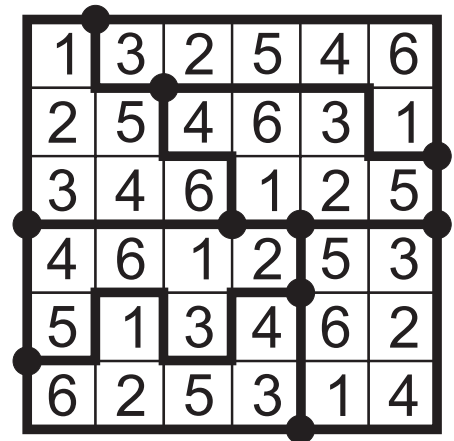
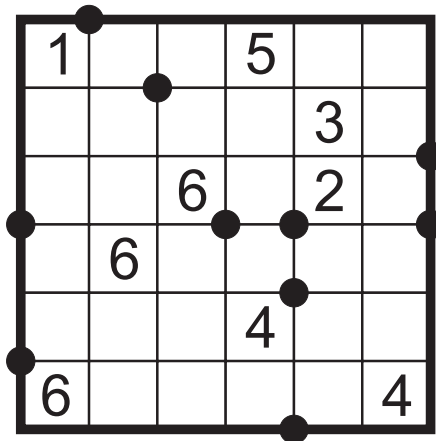


Puzzle 7 – Tripod

Fill the grid with digits 1-6 and divide the grid into some regions, so that each digit appears exactly once in every row, column and region. All points where three lines meet are given. There are no points where four lines meet.

25
points

25
points

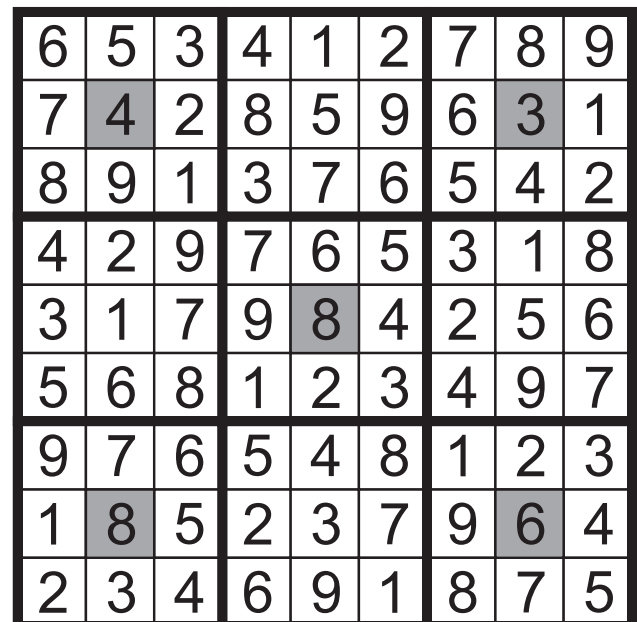
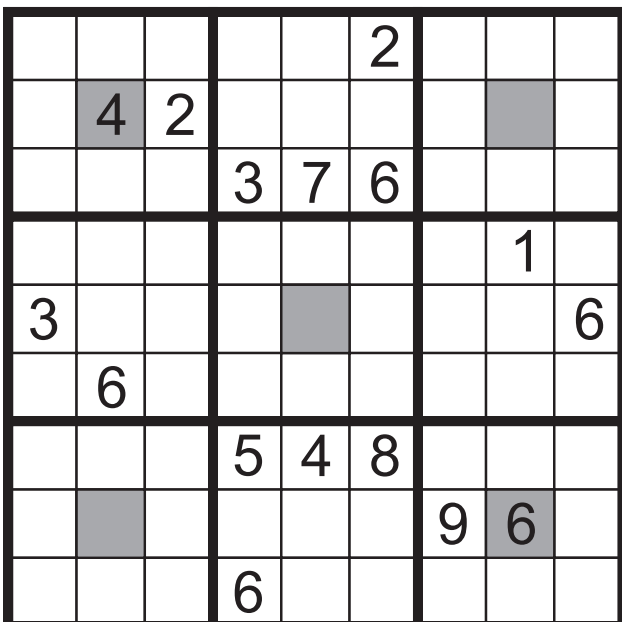


Puzzle 8 – Increasing roundabout

Standard Sudoku rules apply. Additionally, the eight cells around any coloured cell are strictly increasing around it, with starting point and direction unspecified.

25
points

45
points



Puzzle 9 – False Sudoku

Standard Sudoku rules apply. Each row/column/region contains digits 1-N (N is the length of the side) exactly once. All given clues are wrong.

20
points

25
points

40
points

	1	4	
3			
3	3		
			1

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

Puzzle 10 – No touch Sudoku

Standard Sudoku rules apply.

Cells with the same digits do not touch, not even diagonally.

45
points

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

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

Puzzle 11 – Sick kropki

Fill in the grid with digits from 1 through 9 so that no digit repeats in any row, column or region. If the puzzle only has N rows where N is less than 9, then only N different digits can be used.

All edge adjacent cells containing digits with difference 1 are marked with a white circle. All edge adjacent grid cells with one of the digits being twice the other are marked with a black circle. Neighbouring cells containing 1 and 2 may be marked with either a white circle or a black one. All available circles are given.

20
points

40
points

8					

8	3	4	2
2	4	8	3
4	2	3	8
3	8	2	4

Puzzle 12 – Diagonal sums

Standard Sudoku rules apply. Additionally, numbers given outside equal to the sum of digits in the given diagonals.

25
points

50
points

				⑥
				⑫
⑭				

2	4	1	3	⑥
3	1	4	2	
1	3	2	4	
4	2	3	1	⑫
⑭				

Puzzle 13 – Three-digit sums

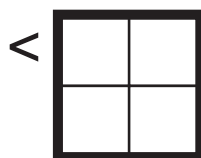
Standard Sudoku rules apply. If two blocks have a comparison sign between them, it must be satisfied by the two three-digit numbers that the blocks contain.

In the example puzzle, comparisons are made on two-digit numbers.

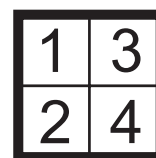
65
points



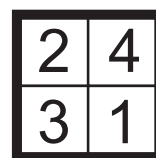
V



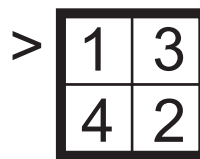
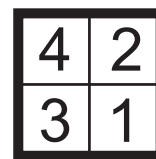
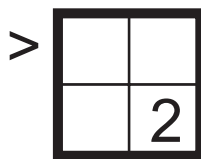
II



V



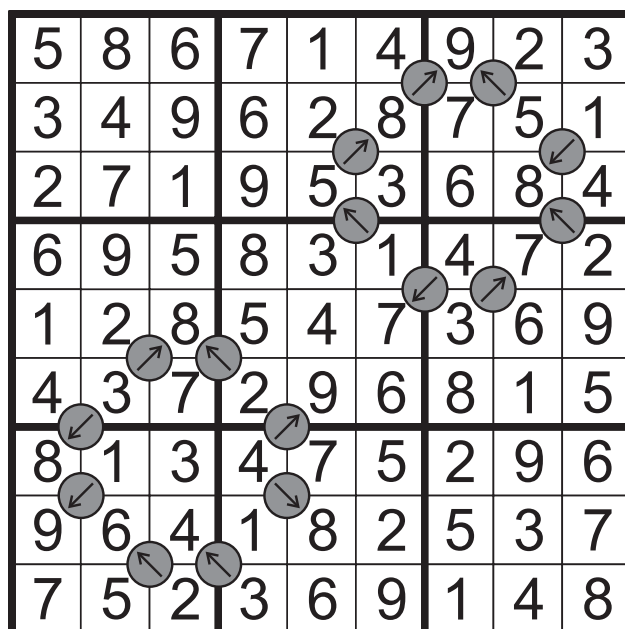
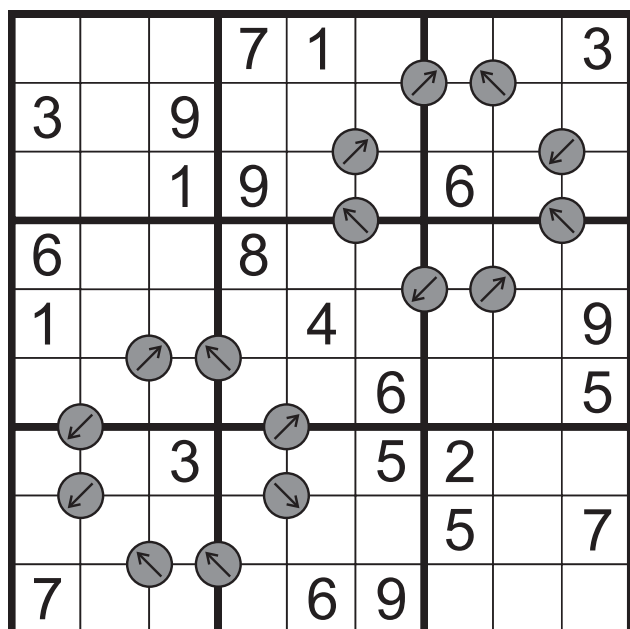
II



Puzzle 14 – Quad Max

Standard Sudoku rules apply. Arrows point to the largest digit in the four neighbouring cells. Digits may repeat around an arrow, but the largest digit is unique.

65
points



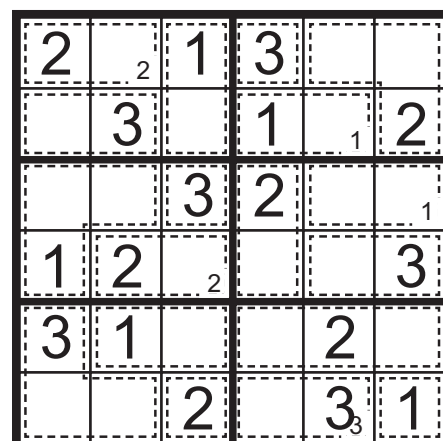
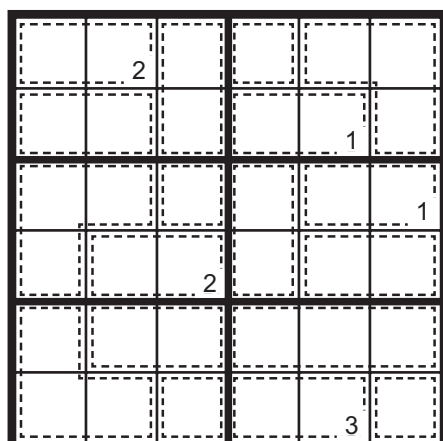
Puzzle 15

Small zones Sudoku

Fill in the grid with digits 1 through 4 (1 through 3 in the sample) so that each digit appears in each row, column and bold region exactly once. There is exactly one number in each of the dotted regions. If such a zone has a number indicated, that number has to appear in that zone (but not known which cell). Dotted regions may cross bold ones (although this is not the case in the sample puzzle).

30
points

55
points



**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

Part 11 Not easy classics

13:50–14:35
45 minutes – 590 points

Fill in the grid so that each row, column and region contains each number between 1–9 exactly once.

15 points	15 points	15 points	15 points	35 points	45 points	50 points
55 points	55 points	55 points	55 points	60 points	60 points	60 points

**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

Part 12 3D Sudoku

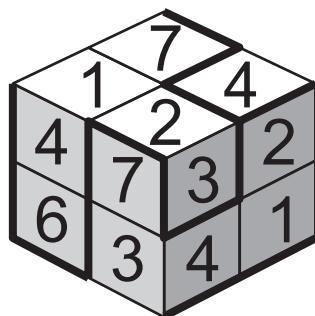
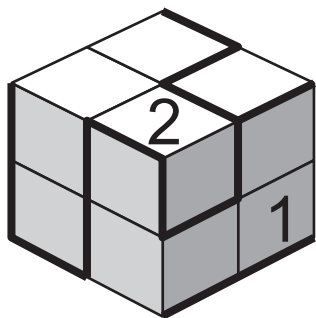
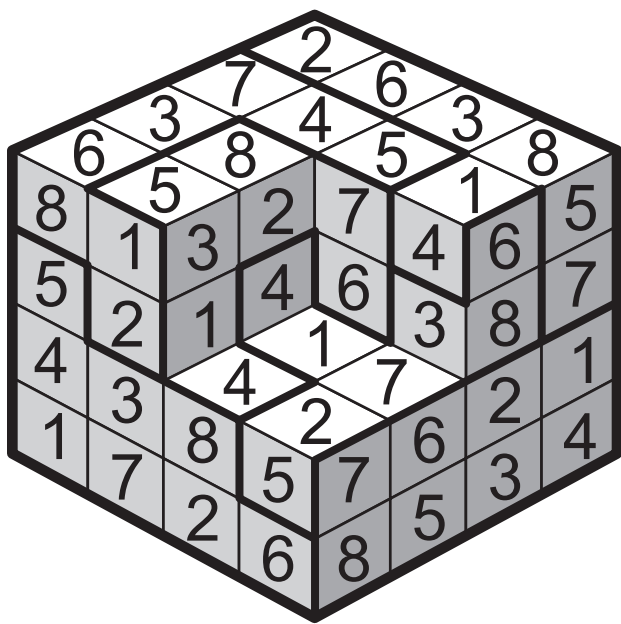
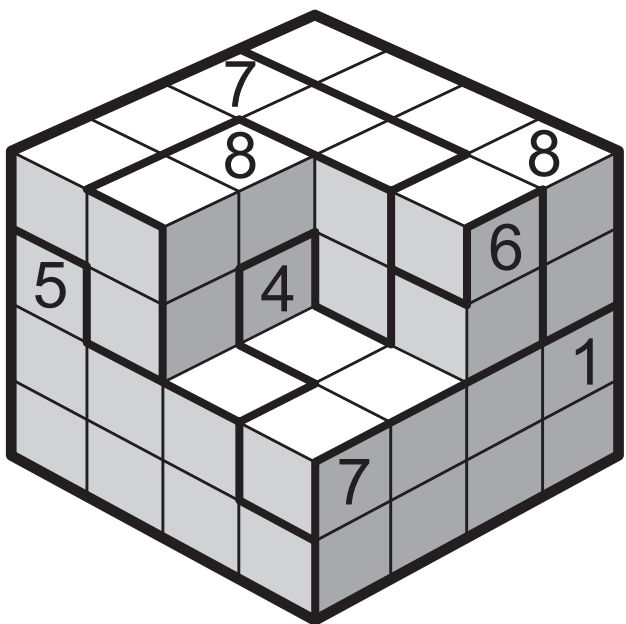
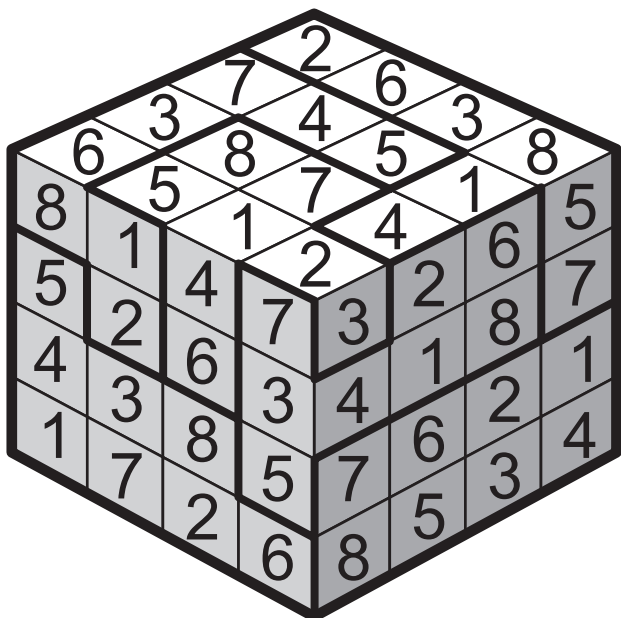
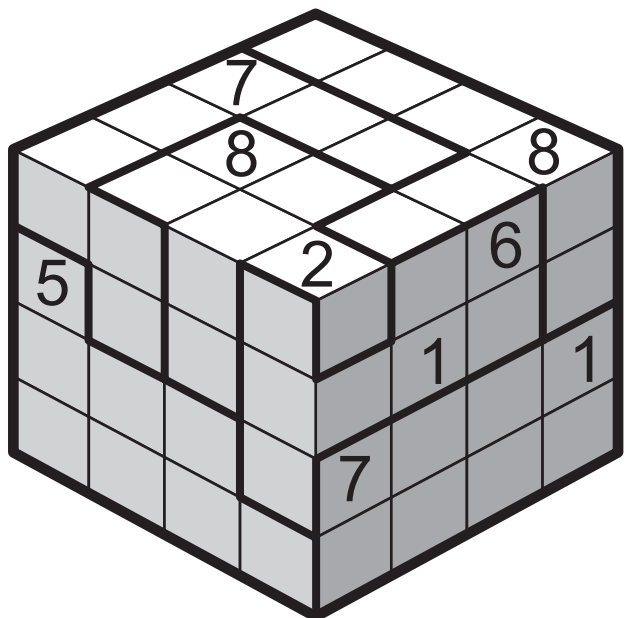
14:45–15:15
30 minutes – 140 points

In this round, you will solve an Amorphous Sudoku on a cube that can be taken apart into separate pieces.

As demonstrated by the sample puzzle, there is a cube with side 4, with one of its side 2 sub-cubes being removable. If the small cube is in place, the surface of the large cube forms an Amorphous Sudoku puzzle: rows are planar sections of the cube, along any of the three cardinal directions, with regions also defined on the surface. If the small cube is removed, the remainder still forms an Amorphous Sudoku, it's similarly the planar sections of the resulting object that count as rows. The small cube itself does not contain a valid Sudoku.

The actual puzzle will be solved on a cube made of hard paper. The size of the puzzle will be of side 4. One of the side 3 sub-cubes will come off, from which in turn a side 2 sub-cube will come off. This results in three different Sudoku puzzles: one which is on the cube of side 4, one which is on the big cube with a side 2 cube taken off, and one which is on the big cube with a side 3 cube taken off.

Partial scores available: every correctly filled digit is worth 2 points. Every wrong digit filled in is worth -1 points.



**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Part 13 Weakest link

16:05–17:05
60 minutes – 1200 points

Team part

Team Puzzle

Relation Sudoku Quadruplet

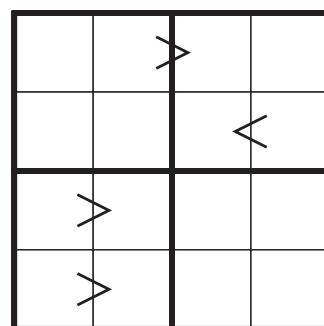
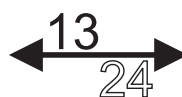
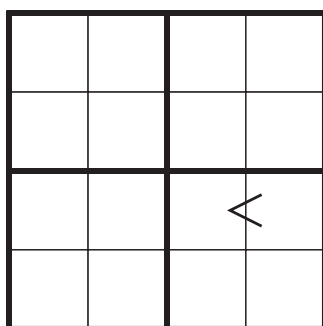
Each small puzzle is an ordinary Sudoku of size 8 (4 in the example). Comparison signs indicate which cell is larger or smaller.

The four small puzzles are linked:

- for puzzles in the same ROW, numbers in the same position in these puzzles must be of different parity. E.g. if the top left puzzle has an odd number (1, 3 etc.) in a given cell, then the cell in the same position in the top right puzzle must be even (2, 4 etc.).
- for puzzles in the same COLUMN, numbers in the same position in these puzzles must satisfy the constraint that if one of them is “small”, i.e. between 1-4 (1-2 in the example), then the other one must be “large”, i.e. between 5-8 (3-4 in the example). E.g. if the top left puzzle has a 1 in a given cell, then the cell in the same position in the bottom left puzzle must be “large”.

Upon completing the individual puzzles, competitors will receive a sheet containing one of the small puzzles, to be solved together at the team table. The order will be: top left, top right, bottom right, bottom left. The arrows that link the puzzles together will very clearly help in identifying the small puzzles.

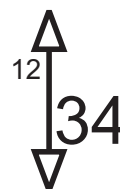
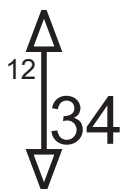
The first small puzzle is uniquely solvable on its own, so are puzzles 1-2 and 1-2-3 together.



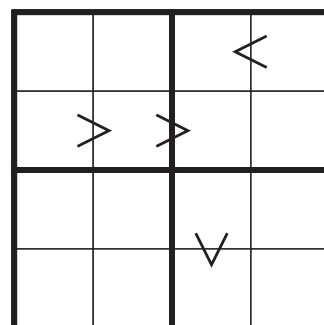
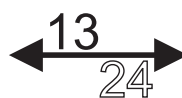
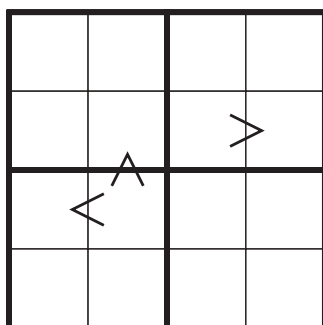
Individual Puzzle

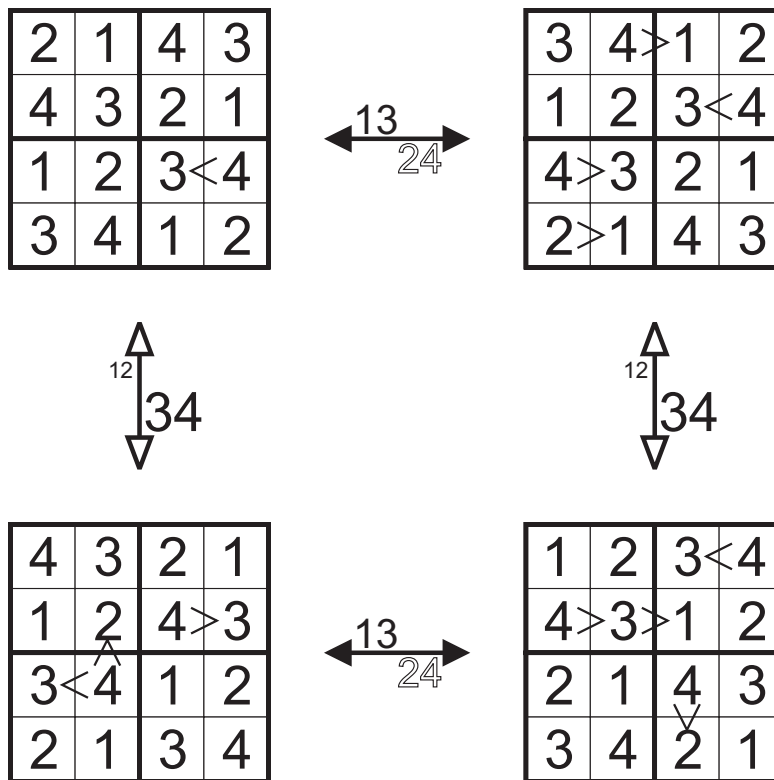
Relation Sudoku

Standard Sudoku rules apply. Comparison signs indicate which cell is larger or smaller. Puzzle sizes will vary between 6 and 9.



General rules: All puzzles need to be completed to advance to the team table.





**6th World Sudoku
Championship**
6-10 November 2011



**20th World Puzzle
Championship**
8-13 November 2011

Individual part

Part 13+1 Playoff

18:15–19:15
60 minutes – xxx points

The top ten competitors will advance to the playoff that will contain nine puzzles. Puzzlers will receive some time advantages based on their ranking during the two days of competition.

Trying to provide a good mixture of puzzles for the finals, in particular balancing between classic and variation Sudokus, there will be three different kinds of puzzles all along the final session.

The ten puzzlers start solving their puzzles at ten columns of tables, each of them set up to be moving ahead along a column, similarly to a relay. Upon solving a puzzle, a competitor can move one table ahead where the next puzzle awaits them. However, the fourth row of tables only contain seven tables, so the last three puzzlers to get past three puzzles correctly will be eliminated at that stage. Similarly, after three more puzzles, the number of tables shrinks again, from seven to five. Finally, the last three puzzles on the last three rows of tables will decide on ranking between the top five.

At all times, a marker will be sitting next to each puzzler, immediately checking each puzzle. After finishing a puzzle, the paper should be handed over to the marker who marks it. This will take a minute, regardless of the puzzle and whether it was solved correctly. Once the minute is up, the puzzle is returned to the solver. If it was wrong, they have to start solving it again (or correcting it), the process of marking it again will be the same. If it was correct, the puzzler can immediately move to the next table.

The three different styles will be: Classic Sudoku, Sudoku Central Clues and one of the variations to be specified later. We are confident that such a good level of designed diversity will allow all finalists to have a good challenge for the title race and that we will see an exciting Final!

More information will be given shortly before the event.