



14th 24HPC Instructions Booklet



14th 24 Hours Puzzle Championship

21-23rd March 2014
Hotel Amadeus, Budapest
Hungary

PUZZLES BY:
TAWAN SUNATHVANICHKUL

1.	Twins	45 points	
2.	Navigation Sudoku	55 points	
3.	Number Link	25 points	
4.	Minesweepers	30 points	
5.	Encrypted Mines	40 points	
6.	Water and Fire	70 points	(30+40)
7.	Digital Sudoku	30 points	
8.	Scrabble	70 points	
9.	Tetrscope	45 points	
10.	The Persistence of Memory	85 points	(35+50)
11.	Spy Battleships	110 points	
12.	Kuromasu	75 points	(45+30)
13.	Domino Kakuro	65 points	
14.	Hakoiri	90 points	(20+30+40)
15.	Little Killer Sudoku	90 points	
16.	Voyage for Fine Wine	75 points	(75-15)

Total: 1000 points

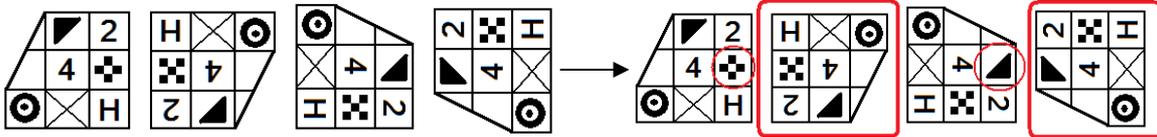
PUZZLE IDEAS WERE OBTAINED AS FOLLOWS:

Navigation Sudoku	Brands 2013 Sudoku
Encrypted Mines	Erich Friedman
The Persistence of Memory	Serkan Yurekli
Spy Battleships	Diogen
Hakoiri, Number Link, Kuromasu	Nikoli
Domino Kakuro	Tim Peeters

1. TWINS

45 POINTS

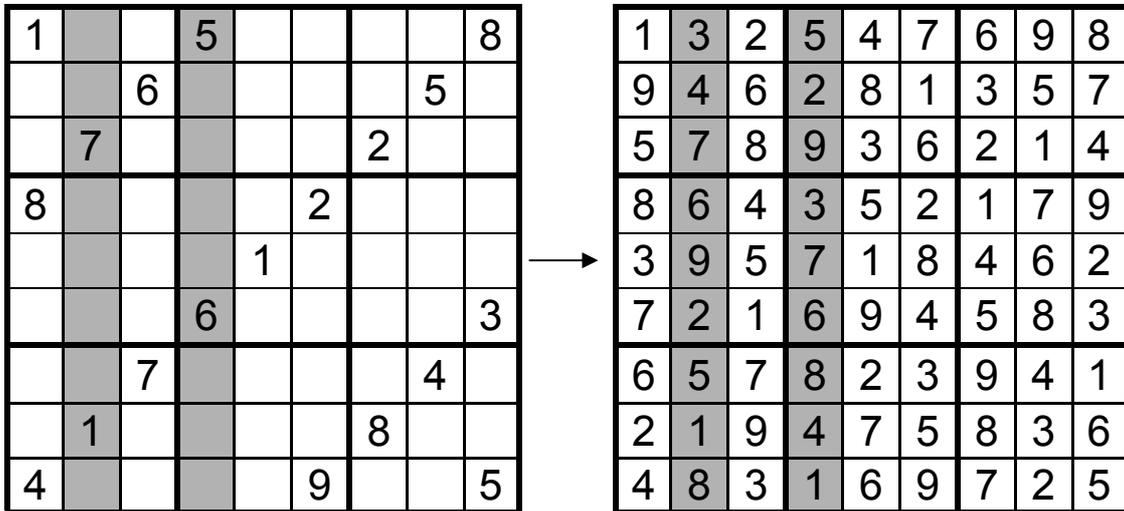
Ignoring their rotations, find the 2 pictures that forms a match. Differences are reasonably visible and will not be based on colours.



2. NAVIGATION SUDOKU

55 POINTS

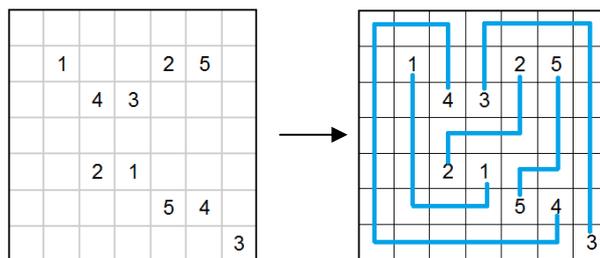
Fill in numbers from 1-9 so that no numbers repeat in each row, column and bolded 3x3 region. The numbers in the 2nd and 4th column indicates the nth column that the number 2 and 4 appear in that row respectively.



3. NUMBER LINK

25 POINTS

Draw straight lines connecting adjacent cells from one number to its identical partner. No lines may overlap or cross diagonally.



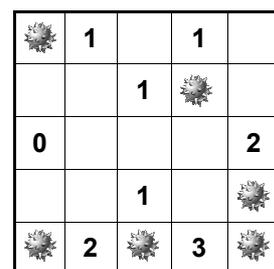
4. MINESWEEPERS

30 POINTS

Locate a number of mines in the grid. Numbers in the grid represent the amount of mines surrounding that square. There can only be one mine in each cell. Mines cannot occupy cells with numbers in them.



[6 mines]



5. ENCRYPTED MINES

40 POINTS

Locate a number of mines in the grid. Letters in the grid stand for different numbers. Each number can only be represented by one letter, all possible numbers are given. Numbers in the grid represent the amount of mines surrounding that square. Mines cannot occupy cells with letters in them.

A				D
	A			
	A			
B		E		C

→

2				0
	2			
	2			
1		4		3

[7 mines]

A	B	C	D	E
2	1	3	0	4

6. WATER AND FIRE

30 + 40 POINTS

Divide the grid into regions of orthogonally adjacent cells. All regions will contain letters that spell out either WATER or FIRE.

W	F	F	E	I	W
R	I	E	R	R	R
A	T	E	E	W	E
F	T	R	F	A	A
R	R	W	I	E	T
E	I	A	T	R	T

→

W	F	F	E	I	W
R	I	E	R	R	R
A	T	E	E	W	E
F	T	R	F	A	A
R	R	W	I	E	T
E	I	A	T	R	T

7. DIGITAL SUDOKU

30 POINTS

Fill in the grid with numbers from 1-6 in digital form so that no digit repeats in any row, column or 3x2 bolded region. Some fragments of the digital forms are already given. Example taken from Cihan Altay in USPC 2005

0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

→

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

8. SCRABBLE

70 POINTS

Fill in the grid with 24 listed words reading left-right and top-bottom. No unlisted word may be formed. All words must link. All As are given. Only 8 words shown in the example.

				A	
A		A		A	
	A		A		A
					A

ARAL
FLEA
LAVA
RAIL
SOAP
STAR
TAPA
TAPE

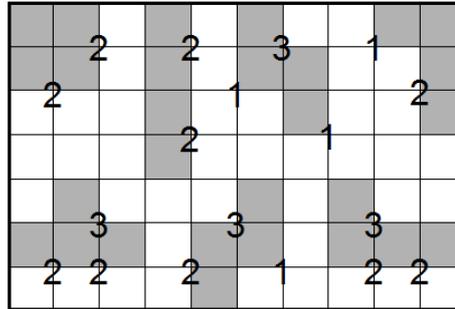
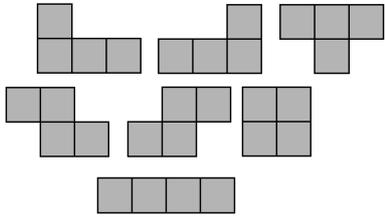
→

		S	T	A	R
T		O			
A		A	R	A	L
T	A	P	A		A
E			I		V
		F	L	E	A

9. TETRASCOPE

45 POINTS

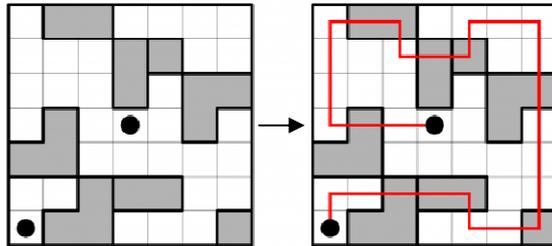
Locate a set of tetrominoes in the grid. Pieces may be rotated but not reflected. Numbers in the centre of four cells represent how many of that four cells are occupied by tetromino pieces. Pieces may not touch each other, not even diagonally.



10. THE PERSISTENCE OF MEMORY

35 + 50 POINTS

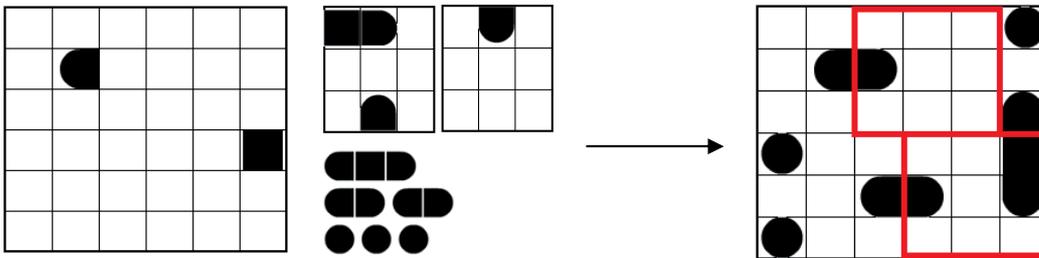
Locate a snake, travelling vertically and horizontally, in the grid. The snake will pass through all grey regions. The path that the snake makes in a region will be repeated in other identical regions (without rotation or reflection). The snake may not touch itself, even at a point. The head and tail are given. *Example taken from Serkan Yurekli's "Puzzle Robot"*



11. SPY BATTLESHIPS

110 POINTS

Locate the fleet of battleships in the grid. No ships touch each other, not even diagonally. All you have is 4 satellite photos of the completed grid. Photos can be rotated but not reflected. Photos do not overlap. You don't have to show where each photos are. Ships may not occupy cells with waves.

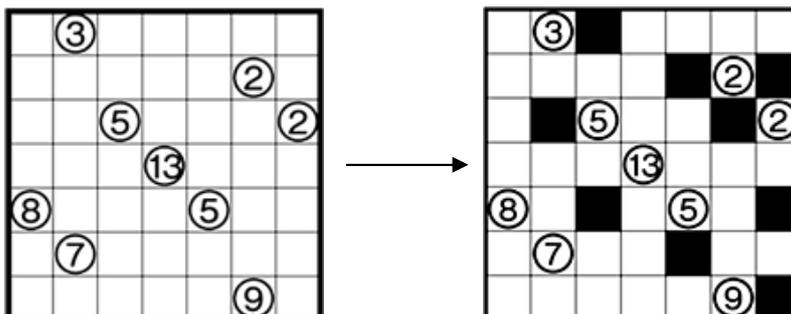


12. KUROMASU

45 + 30 POINTS

Shade in some empty cells so that each number represents the number of cells that can be seen horizontally and vertically from that cell, including the cell itself. Black squares cannot be orthogonally adjacent to each other. In the end, all white cells must interconnect.

Example taken from Nikoli



13. DOMINO KAKURO

65 POINTS

Place the given domino set into the grid so that the sum in each consecutive rows and columns match their corresponding value. Numbers may not repeat in the same sum. Once all numbers are filled in, mark the locations of the dominoes. Each domino is used exactly once.

0 1	1 2	2 3
0 2	1 3	
0 3		

		4	2		
5				6	
4					2
			1		
		4			
	5				
	3				

→

		4	2		
5	3	2		6	
4	1	0	3		2
			1	1	0
		4			
	5	3	0		2
	3	1	2		

14. HAKOIRI

20 + 30 + 40 POINTS

Place one of each shapes (circle, square and triangle) in each region so that all cells containing a shape are orthogonally connected. Identical shapes may not touch each other, not even diagonally. Example taken from Otto Janko's "Ratsel und Puzzles"

○				□
			○	
△	□		△	
	○			○

→

○				□
△	□	△	○	△
	○		□	
△	□		△	
	○		□	○

15. LITTLE KILLER SUDOKU

90 POINTS

Fill in the grid with numbers from 1-9 so that no digit repeats in any row, column, 3x3 bolded region and the two main diagonals. Numbers that appear outside the grid indicate the sum of all numbers in that diagonal. 1-6 is used in the example.

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

4 7 7
 ↙ ↘ ↘
 ↖ ↖ ↖
 10 5
 ↘ ↘
 4 2

16. VOYAGE FOR FINE WINE **75 POINTS**

Find all the listed words, they can go in any straight direction (horizontally, vertically or diagonally). You get 75 points minus 15 for every word you don't find. There will be no negative points.

T	H	R	E	E	R
H	F	O	U	R	T
X	I	N	W	I	H
	V	E	X		G
S	E	V	E	N	I
E	H	N	I	N	E

ONE
 TWO
 THREE
 FOUR
 FIVE
 SIX
 SEVEN
 EIGHT
 NINE
 TEN