NAME:	COUNTRY:	POINTS:	



13th 24 Hours Puzzle Championship

9-11, NOVEMBER, 2012 HOTEL AMADEUS BUDAPEST

PUZZLES BY:

FATIH KAMER ANDA AND TALHA BAYKAL

Prime Snake 85 POINTS (45+40)

SNAKE 90 POINTS (45+45)

DOTTED SNAKE 35 POINTS

SUDOKU WITH RELATIONAL SIGNS 25 POINTS (15+10)

SKYSCRAPERS 25 POINTS

SKYSCRAPER & AREAS 40 POINTS (20+20)

GAPPY SKYSCRAPERS 15 POINTS

DIAGONAL SKYSCRAPERS 25 POINTS

PAINT IT BLACK 90* POINTS

SLITHER LINK 75 POINTS (45+30)

TAPA 65 POINTS (25 + 40)

HITORI 80 POINTS (30+50)

BATTLESHIPS IN HEXAGON 140 POINTS (70 + 70)

THERMOMETER-YING YANG 150 POINTS (75+75)

TENTS 60 POINTS (25+35)

TOTAL 1000 POINTS

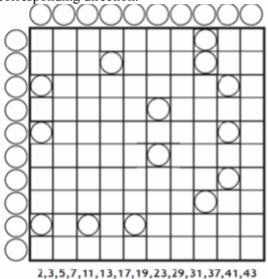
PUZZLE TESTED BY SALIH ALAN AND M.ALI ELMA

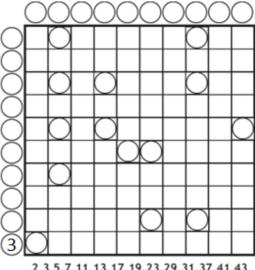
^{*}PARTIAL SCORES ARE AVAILABLE. PARTIAL SOLUTIONS MUST ALWAYS PART OF A CONSISTENT SOLUTION.

^{**}HALF THE POINTS WILL BE RECEIVED IF THE SOLVER MAKES A MISTAKE IN AT MOST TWO UNIT SQUARES.

1. Prime Snake (45+40 Points)

Fill in every circle inside and outside the grid with one of the given prime numbers. Locations of all prime numbers inside and outside the grid are given as circles. Draw a snake of numbers in the diagram that starts with 1, grows in value with every visited adjacent square and ends at 44. The snake goes through all circles inside the grid and does not touch itself, not even diagonally. The numbers outside the grid indicate the number of squares that are occupied by the snake in the corresponding direction.

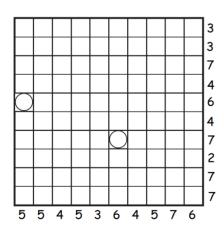


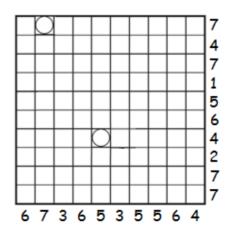


2,3,5,7,11,13,17,19,23,29,31,37,41,43

2. Snake (45+45 Points)

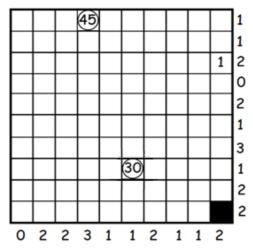
Find a snake of length 50 beginning and ending in the cell labeled with cell. The snake goes from cell to cell vertically or horizontally, but not diagonally. The snake does not touch itself, not even diagonally. The numbers outside the grid indicate how many squares are used by the snake in that row or column.





3. Dotted Snake (35 Points)

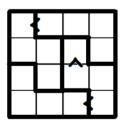
Locate a 45 square long snake in the grid, whose head and tail are given, without touching itself even at a point. Every third segment of a snake has a dot on itself. Numbers outside the grid indicate the amount of dots corresponding directions. The black cells not a part of the snake.

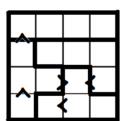


4. Sudoku with Relational Signs (AZOT) (15+10 Points)

Write given letters which A, Z, O and T into the empty fields such that each letters occurs in all rows, columns and the sections bordered by bold lines exactly once. Letters have to be placed according to the given relational signs.

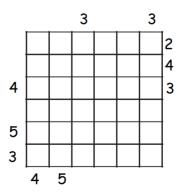
A>Z>O>T





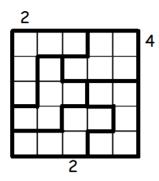
5. Skyscrapers (25 Points)

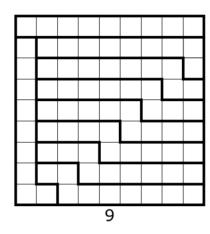
Each row and column contains buildings of different heights (1–6). The numbers outside the grid indicate how many buildings are visible from that direction.(the higher buildings hide the lower ones behind them)



6. Skyscrapers & Areas (20+20 Points)

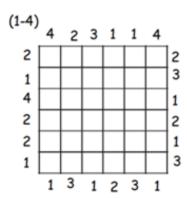
Each row, column and region contains buildings of different heights (1–5 or 1-9). The numbers outside the grid indicate how many buildings are visible from that direction. (The higher buildings hide the lower ones behind them) The whole area is divided into amorphous parts; each such part must contain houses of different heights.





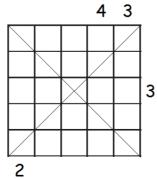
7. Gappy Skyscrapers (15 Points)

Each row and column contains buildings of different heights (1-4). The numbers outside the grid indicate how many buildings are visible from that direction. (The higher buildings hide the lower ones behind them) Each row and column should contain two empty squares.



8. Diagonal Skyscrapers (30 Points)

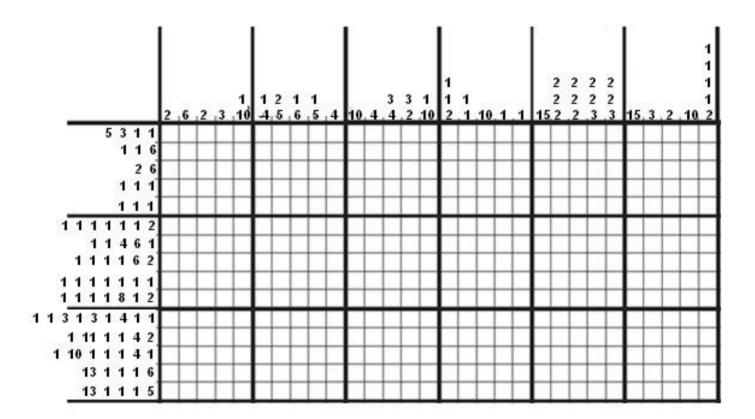
Each row, column and two diagonal lines contain buildings of different heights (1–5). The numbers outside the grid indicate how many buildings are visible from that direction. (The higher buildings hide the lower ones behind them)



9. Paint it Black (90* Points)

The numbers on the left of each row and the top of each column tell how many continuous groups of black squares there are in that line, and, in order, how many consecutive black squares are in each group. Between two groups of black squares there is at least one, but maybe more white square. The rows may optionally also start or end by some white squares. In case of correct solution, a picture emerges in the figure.

Partial point: 5 points for each completed 5x5 subparts.



10. Slither link (45+30 Points)

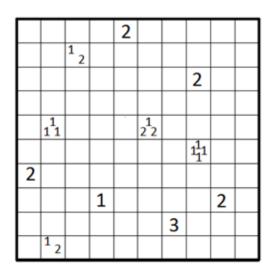
Draw a single continuous loop by connecting neighboring dots along the dotted lines. The numbers indicate how many edges of its field are used for the loop. The loop may not touch or cross itself, and it doesn't need to touch all of the dots.

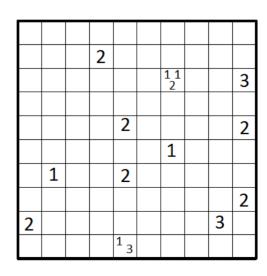
1.3.	1.31	1 3 1 3
1 1	3 3	3
3	1 1	3 1
3	3 1	3 3
1 3	3 1 3 1	1 3 3

2			
2 0	1 2	2	2 .
1	•	0 0	
2 2	1	1	
0 0	2.	2	2
1 1		0.1	
.22	1		
,	.2.	$\cdot^{2} \cdot \cdot^{2}$	1.1

11. Tapa (25+40 Points)

Paint some cells black to create a continuous wall. Number/s in a cell indicate the length of black cell blocks in its eight surrounding cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.





12. Hitori (30+50 Points)

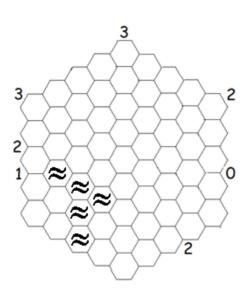
Black some cells so that each row and each column does not contain the same digit more than once. No two black cells can share an edge, and all remaining cells must be connected orthogonally.

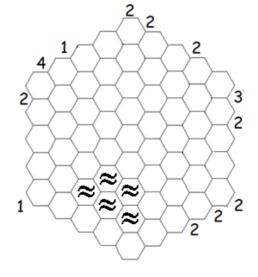
1	6	9	8	4	3	8	1	7
9	2	3	4	7	8	1	9	6
2	3	6	7	2	4	8	4	1
2	7	1	6	1	7	9	8	8
3	5	4	1	4	6	7	6	5
8	7	3	3	9	1	6	4	5
7	8	5	7	4	2	1	9	3
1	4	3	2	3	6	5	7	5
9	1	7	2	6	4	2	8	2

8	8	10	2	6	5	9	4	9	1
9	8	5	6	1	3	1	7	4	10
5	2	7	8	3	9	8	1	10	6
8	3	9	9	9	10	5	7	4	2
2	7	4	8	9	5	7	6	1	4
8	1	9	4	4	6	5	10	5	7
4	7	2	1	5	4	3	8	3	9
3	9	2	2	1	4	10	9	8	4
10	9	6	5	2	8	6	3	5	4
1	5	8	6	10	6	2	6	7	5

13. Battleships in Hexagon (70+70 Points)

Place the entire fleet in the diagram. Ships can be lying horizontally or diagonally, and must not touch each other. Numbers along the sides indicate the number of ship parts that can be found in respective directions. If a number is located in a way that it can be seen to give a clue for two different directions, then it actually is giving correct clue for both directions. All numbers that can serve as such double clues are given.





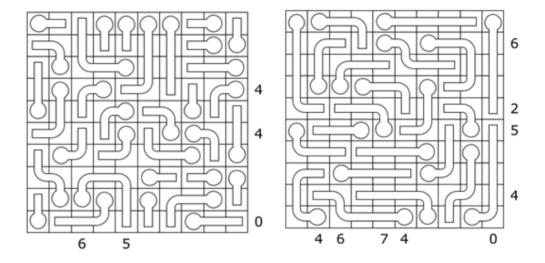




14. Thermometer-Ying Yang (75+75 Points)

Thermometers: Fill the thermometers, starting at the circled end, such that the numbers at the borders give the number of filled fields in that row or column. The thermometers may also be empty.

Yin Yang: Fill each empty cell with either a black circle or a white circle. All white circles should form a single interconnected area and similarly all black circles should form a single interconnected area. There cannot exist any 2x2 cell region consisting of same color circles anywhere in the grid.



15. Tents (25+35 Points)

Locate the tents in the grid. Each tree is connected exactly one tent, and each tent is connected to exactly one tree. Trees and their tents are found in horizontally or vertically adjacent squares. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.

