Name:	COUNTRY:	POINTS:



# 13<sup>th</sup> 24 Hours Puzzle Championship

9-11. NOVEMBER 2012. BUDAPEST

#### PUZZLES BY:

# NIKOLA ŽIVANOVIĆ

EASY AS ABCD 35 (15+20)

ABBA 55 (20+35)

SNAIL BATTLESHIPS 125 (45+80)

SUDOKU SLOT MACHINE 40

VAMA 75 (35+40)

RECTANGLES WITH THE WALL 45

SNAKE 45

TARGET 70 (25+45)

PRODUCT PYRAMID 60 (20+40)

FILLOMINO 50 (25+25)

SCRABBLE 90

NO NEIGHBOURS 90

NURIKABE 25

HIDDEN WORDS 60

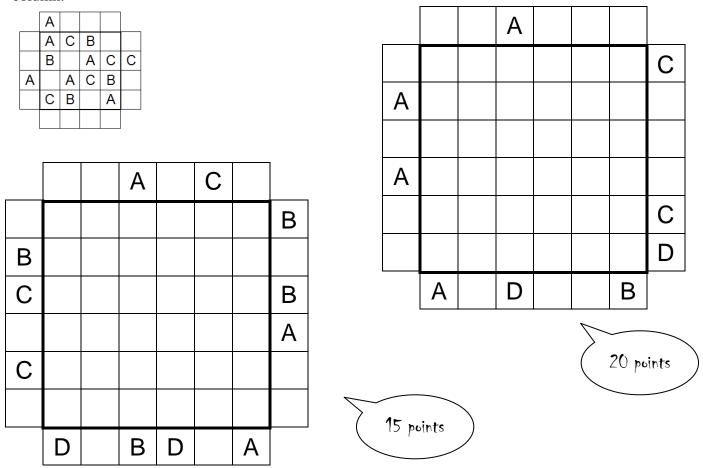
OUTSIDE KROPKI 60

RISING SKYSCRAPERS 75 (30+45)

total 1000 points

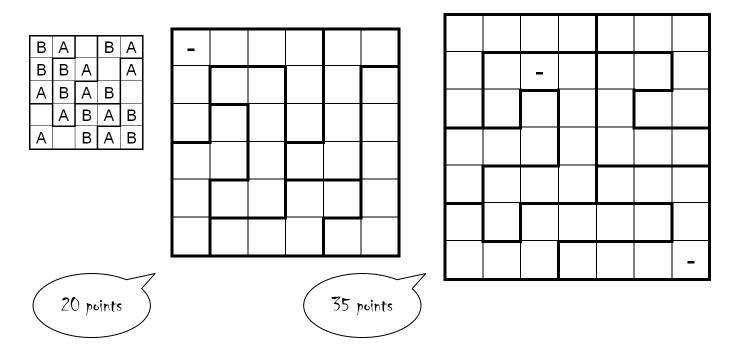
# **EASY AS ABCD**

Write a letter into some of the cells so that in each row and column letters A, B, C and D must occur exactly once and some cells remain empty. The letters outside the grid appear first in that row or column.



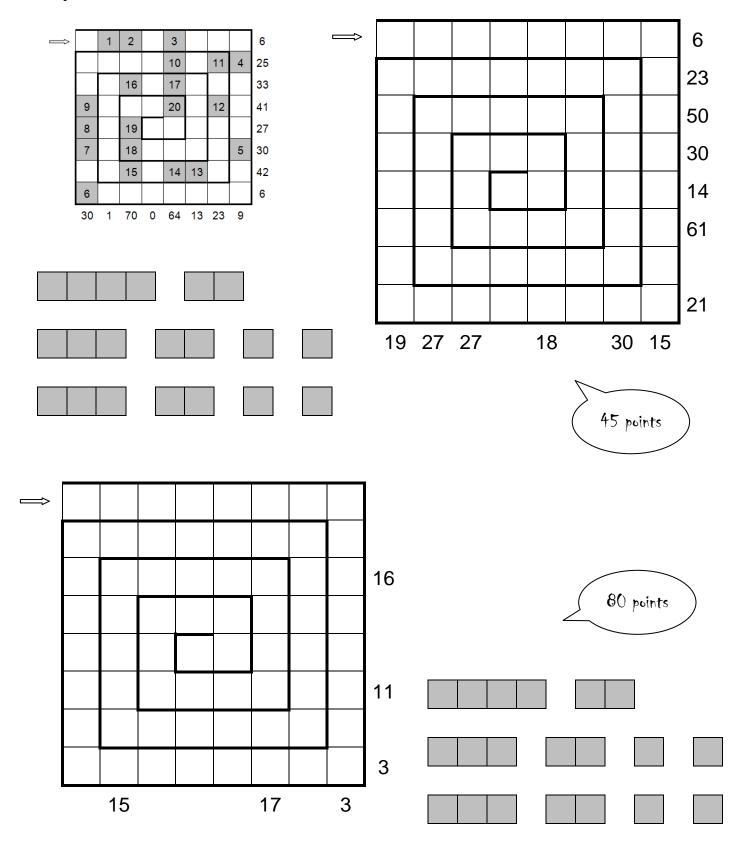
# **ABBA**

Enter the word ABBA along the each outlined snakelike region (in that order). In each row and column must appear exactly two letters A and B. No letter can appear in cells marked with "-".



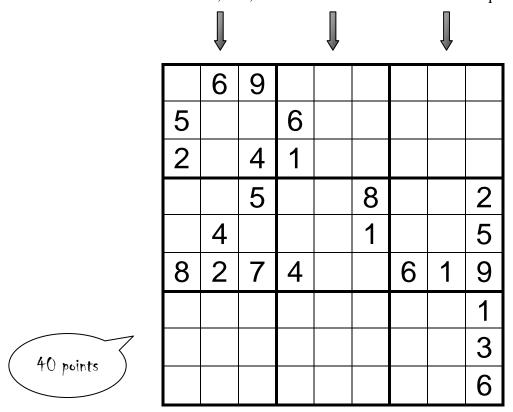
# **SNAIL BATTLESHIPS**

Locate the position of the standard fleet. The ships do not touch each other, not even diagonally. Each part of the ships is numbered. Numbers from 1 to 20 appear in the order along the snail, from outside towards the middle. The numbers outside the grid indicate the sum of the all numbered parts of the ships.



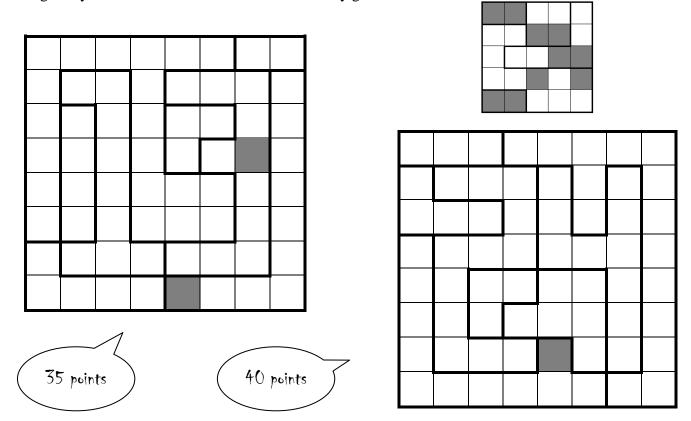
#### SUDOKU SLOT MACHINE

Standard sudoku rules apply. The second, fifth and eighth column are wheels of the slot machine. When you pull the handle, the wheel spins, and the machine will give you all 9 combinations of the same numbers. In the other words, 2nd, 5th and 8th column has the same sequences.



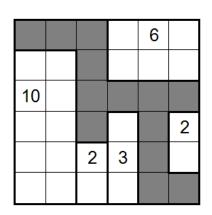
# **VAMA**

In each row, column and outlined region draw exactly two black cells. All black cells are orthogonally or diagonally connected. Some black cells are already given.



#### **RECTANGLES WITH THE WALL**

Along the grid lines draw some non-overlapping rectangles (or squares). Each rectangle has exactly one field with the given numbers. The numbers indicates the size of the rectangle. In addition, paint some squares black to create a single continuous wall. Painted cells cannot form a 2x2 square or larger.





		3				4	
	1				4		
9				3			
		8				2	
	5				4		
2				3			

#### **SNAKE**

Draw a single snake in the grid, 45 cells long, by connecting horizontally and vertically neighbouring cells. The body of the snake cannot touch itself, not even diagonally. The snake's head and tail are given. Numbers outside the grid indicate the number of cells used by the snake in the corresponding row/column.

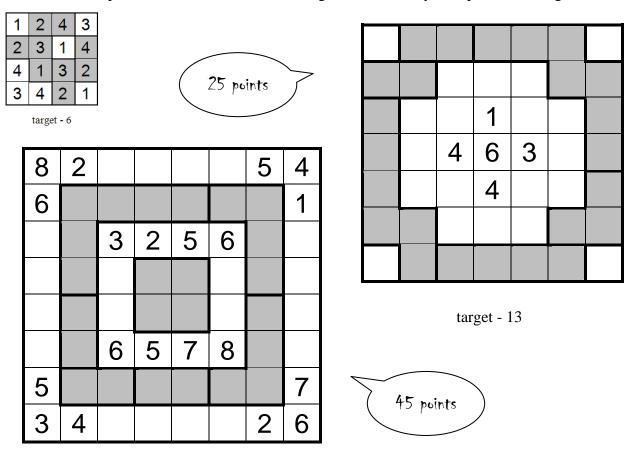
	3	5	5	1	5	3	7	4	5	7
4							25	24	23	22
2							26			21
6		34	33	32	31		27			20
7	36	35			30	29	28		18	19
2	37								17	
6	38	39	40				14	15	16	
4			41		11	12	13			
3			42		10					1
7		44	43		9	8	7	6		2
4								5	4	3



	3	3		3	3	3	3
7							
4							
8							
4							
8 4 5 5							
5			45				
5 4						1	
4							

#### **TARGET**

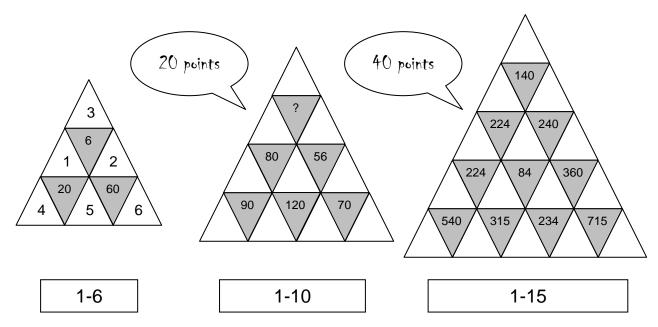
Write a number 1-7 and 1-8 in the second puzzle (1-4 in the example) into every empty cell of the grid, so that no number is repeated in any row or column. There are some cages in the grid – groups of grey cells with thicker borders. Reach the target number (shown below the grid) in every cage using either addition or multiplication of all numbers in the cage. Numbers may be repeated in a cage.



target - 24

#### **PRODUCT PYRAMID**

Place the numbers in the given range below the grids into the white triangles, once each, so that the product of any three numbers surrounding a grey triangle equals to the number written into the grey triangle. Some products may not be given.



# **FILLOMINO**

Write a number into each square of the grid. Fields with same numbers must form horizontal and vertically connected ranges, which consist of as many fields as the number indicates. Two different, horizontal or vertically adjacent ranges may not have the same size.

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

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



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

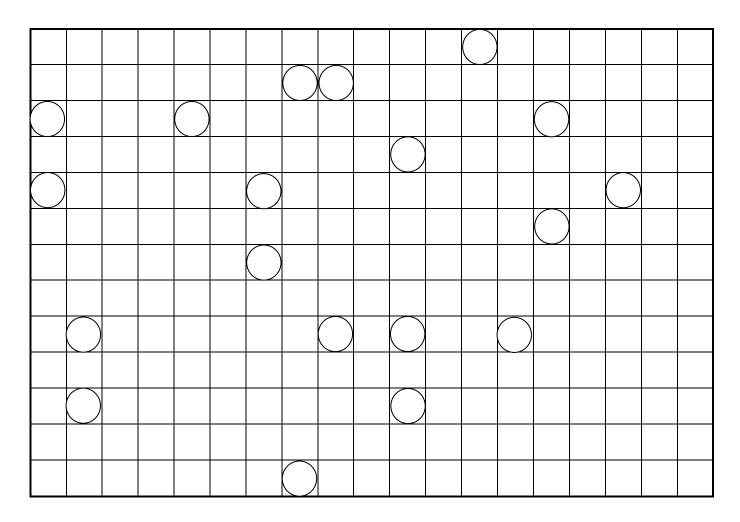


# **SCRABBLE**

Place all the listed words in the grid. First letters of all words are represented by circles. Each word crosses with at least one other word and all words are interconnected. Words that are not on the list cannot appear anywhere in the grid (not even two-letter words).

		(+	
T		Ι	
W		R	
0	N	Е	
		Е	

APPLE	LIME
APRICOT	MANDARINE
AVOCADO	MANGO
BANANA	NECTARINE
CHERRY	ORANGE
GRAPE	PEACH
GRAPEFRUIT	PEAR
GUAVA	PINEAPPLE
KIWI	POMELO
LEMON	





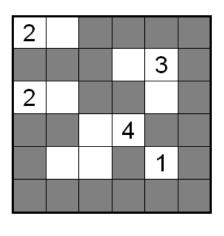
#### **NO NEIGHBOURS**

Put the words (names of Hungarian cities) into the grid, one per cell. The neighboring sections must not contain the same letter. One word will be left over.

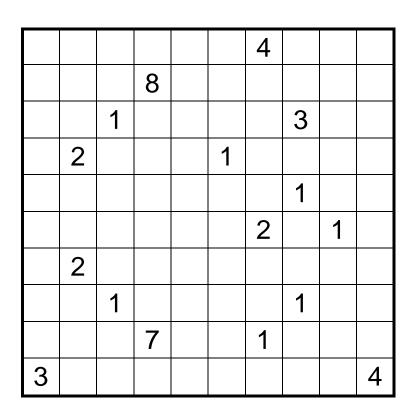
FISH BULL BEAR DOG CAT **TATABANYA PAPA GYOR BAJA KECSKEMET SZEGED CEGLED** SZOLNOK KOMLO **EGER MOR TATABANYA GYOR TOKOL** 90 points OZD VAC **GYULA PAKS HATVAN** PAPA -**KAPOSVAR** SIOFOK

#### **NURIKABE**

Each number in the grid is part of an island, such that the numbers represent the size of the island, including the square that contains the number. The squares that make up an island must be connected horizontally and/or vertically. Islands cannot touch other horizontally or vertically, but they can touch diagonally. The remaining squares represent water, and must be painted black. The water squares form a completely connected path around the islands. No 2x2 region can be completely covered by water.

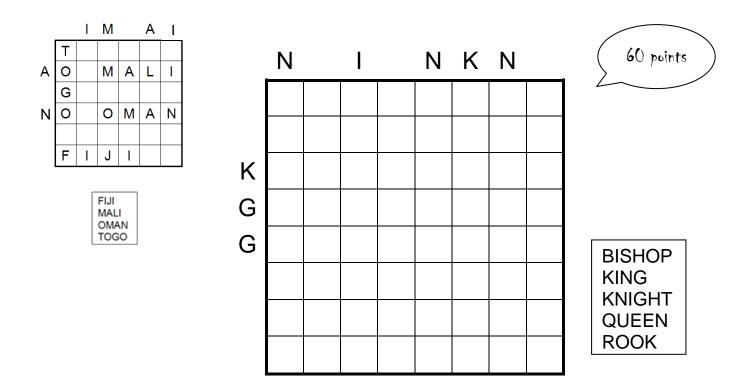






#### **HIDDEN WORDS**

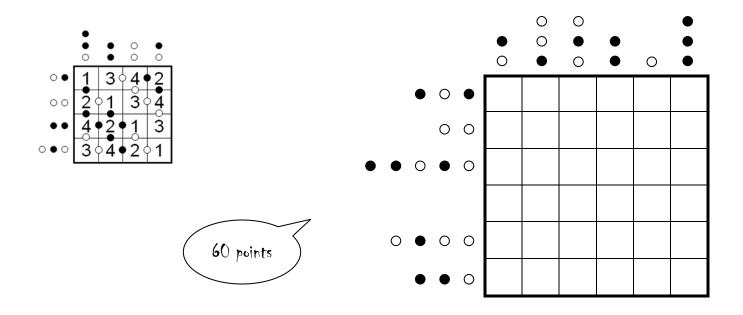
Place all given words in the grid such that words cannot touch each other, not even diagonally. The letters outside the grid means that they must appear in that row or column at least once.



#### OUTSIDE KROPKI

Place the numbers from 1 to 6 (1 to 4 in the example) in the grid such that each number appears in every row and column exactly once. If the absolute difference between two digits in neighboring cells equals 1, then they're separated by a white dot. If the digit in a cell is half of the digit in a neighboring cell, then they're separated by a black dot. The dot staying between '1' and '2' can have any of these dots. All dots are removed outside the grid in that order.

**Note:** You don't need to reconstruct the dots in the grid, just fill in the grid with the numbers.



# RISING SKYSCRAPERS

Place the numbers from 1 to 6 in the first, and 1 to 7 in the second puzzle (1 to 4 in the example) in the grid such that each row and column contains each number exactly once. Each number represents the height of the skyscraper in each cell. The digits outside the grid indicate the number of skyscrapers seen from the corresponding direction. The digits on the grey lines should be in increasing order, from one end to another.

