By Serkan Yürekli
23th - 25th December, 2011
150 minutes

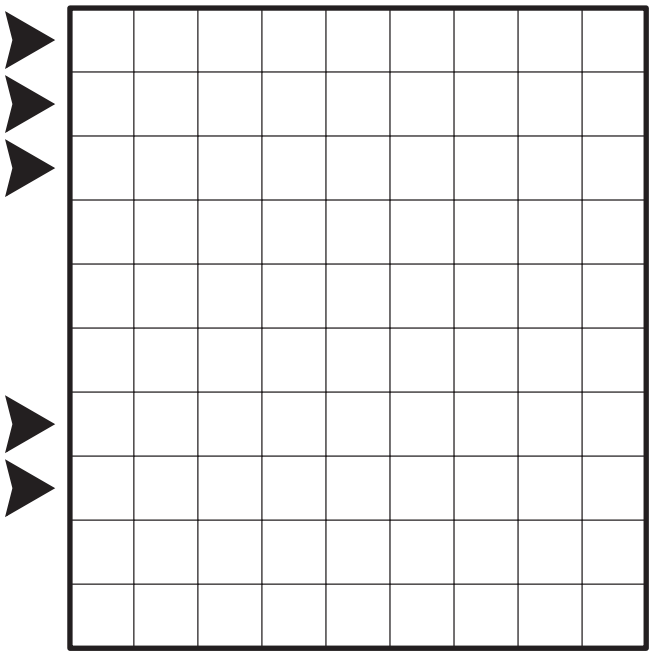
Logo designed by Ümit Berkup
Puzzles tested by Zoltan Horvath

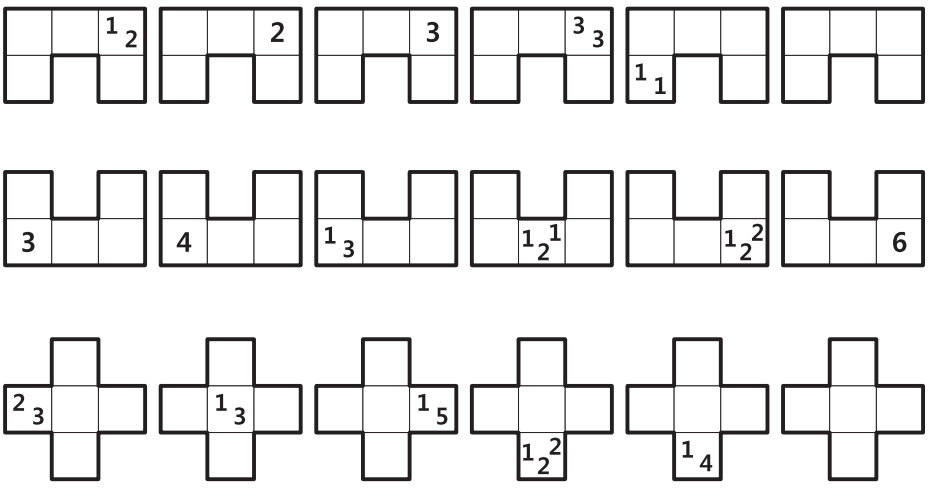
1. Broken Tapa - Broken Pieces - 89 POINTS - Tejal Phatak & Rohan Rao

Fit the pieces, without rotating or reflecting, in the grid and solve the Tapa puzzle.

Paint some cells black to create a continuous wall. Number(s) in a square indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. No 2X2 square can have all black cells. There is no wall segment on cells containing numbers.

Answer Format: For each marked row, enter the number of cells in the longest continuous horizontal group belonging to the Tapa in that row, starting from the top and continuing to the bottom. For the example would be: 14

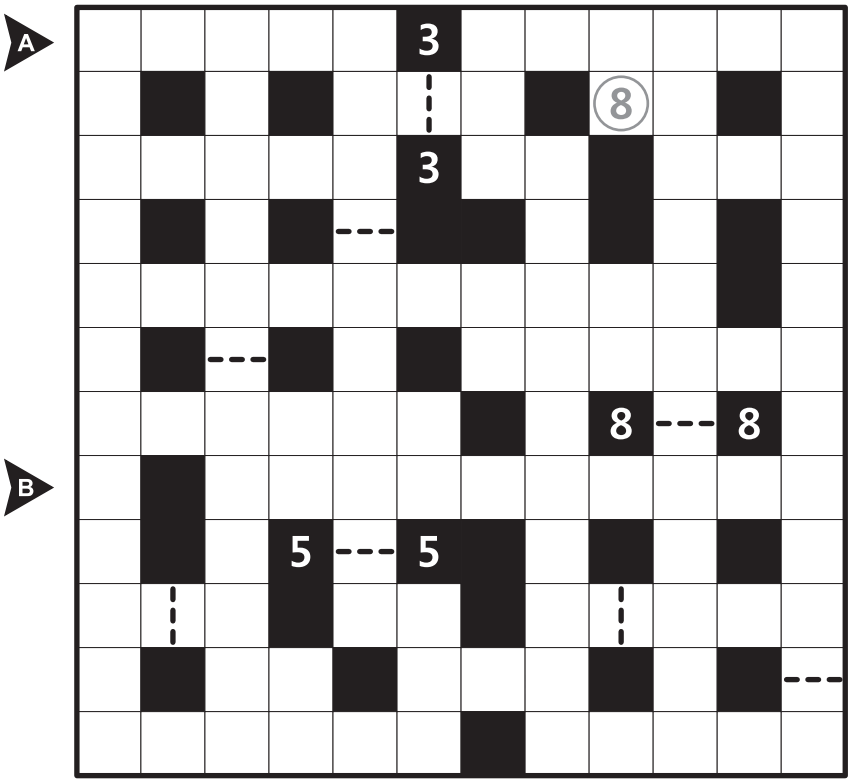




2. Suraromu - Nikoli Selection - 14 POINTS - Tom Collyer

Draw a single closed loop, starting and ending at the numbered circle. The loop travels horizontally or vertically passing through center of white squares. The dotted lines are known as gates. The loop must pass through exactly one square in each gate. The number inside the circle indicates the number of gates. The number inside the black square represents the order in which the loop passes through the gate which touches that black square.

Answer Format: Enter how many times the loop makes a 90° turn in each of the marked rows. For the example would be: 2, 0

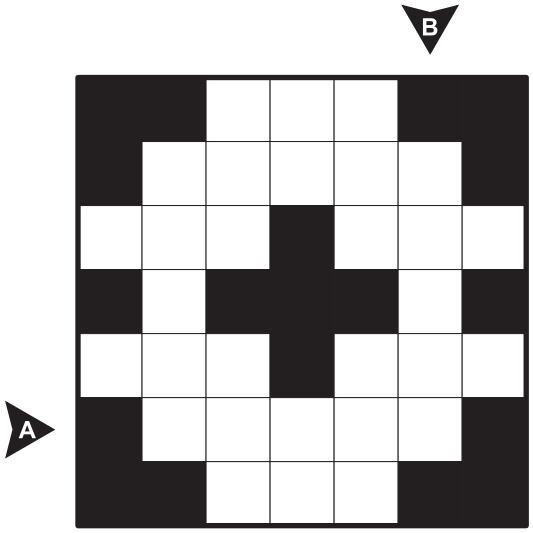


3. Number Skeleton Extra - 20/10 Decathlon - 147 POINTS - Thomas Snyder

Enter all the numbers listed to the left of the puzzle into the grid criss-cross style, either reading left-to-right or top-to-bottom. Each number has an extra digit that must be removed before the number can be entered into the grid.

Answer Format: Write the contents of the marked rows/columns. For the example would be: 123, 987

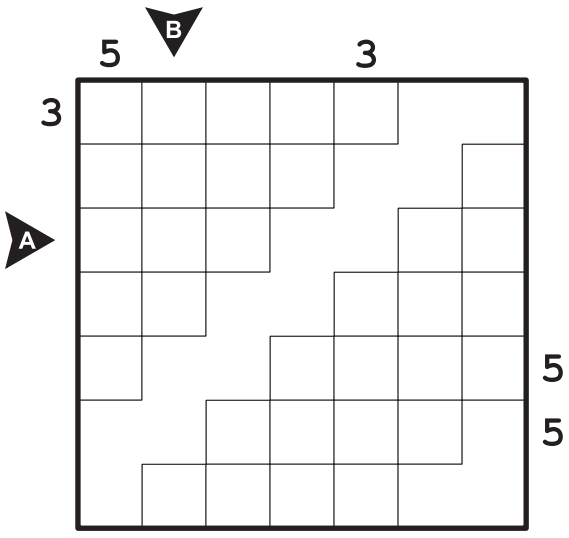
```
384  2765   563374
848  2833   656347
     4873   815855
     5836   851856
     6511
     6741
     6752
     7433
     7672
     8514
```



4. Wacky City - 20/10 Decathlon - 19 POINTS - Thomas Snyder

Place the digits 1 to 6 into the grid so that no digit repeats in any row/column. Digits indicate the height of a building on that cell, and the clue numbers are the number of buildings that can be "seen" (not blocked by a taller building) when viewed from the corresponding direction.
Cells are not uniform size and some cells extend into several rows/columns.

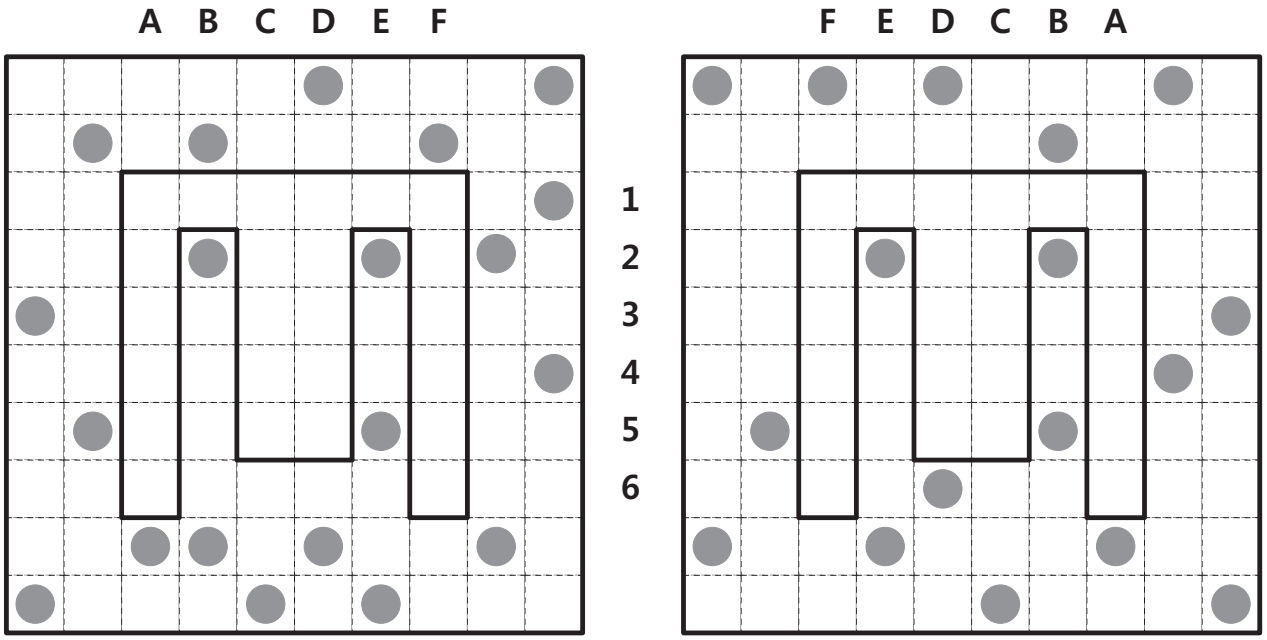
Answer Format: Write the contents of the marked rows/columns. For the example would be: 1324, 4321



5. ESB Flip - FLIP - 98 POINTS - David Millar

Create a loop through each grid such that every cell contains part of the loop and every other 90 degree turn takes place in a cell with a dark circle. The loop must turn at every dark circle. The grids are missing some circles from the outlined rectangles.
The circles must be found and placed where needed. When complete, the circles in the rectangles will mirror one another.

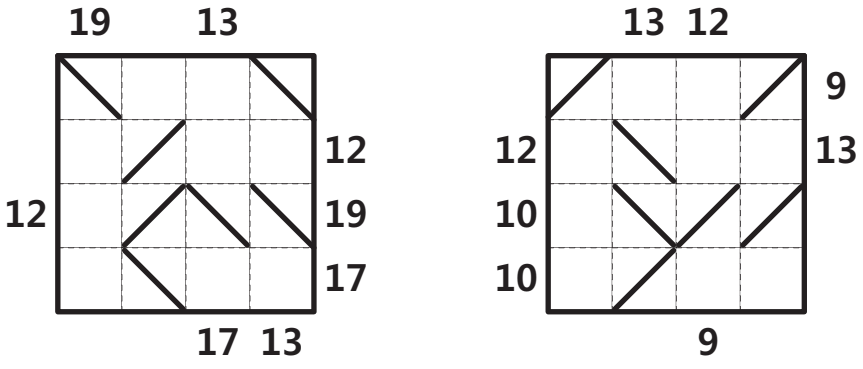
Answer Format: List the location of the placed circles using the row and column names indicated and ordered alphabetically. For the example would be: A3C3D2



6. FLIP Mirror Sums - FLIP - 30 POINTS - David Millar

Fill both copies of the grid with one of each number to make the given sums. The mirrors are flipped in the grids, but the numbers must be in the same locations.

Answer Format: List the numbers in order from left to right, starting at the top row and moving to the bottom row. For the example would be: 697812534

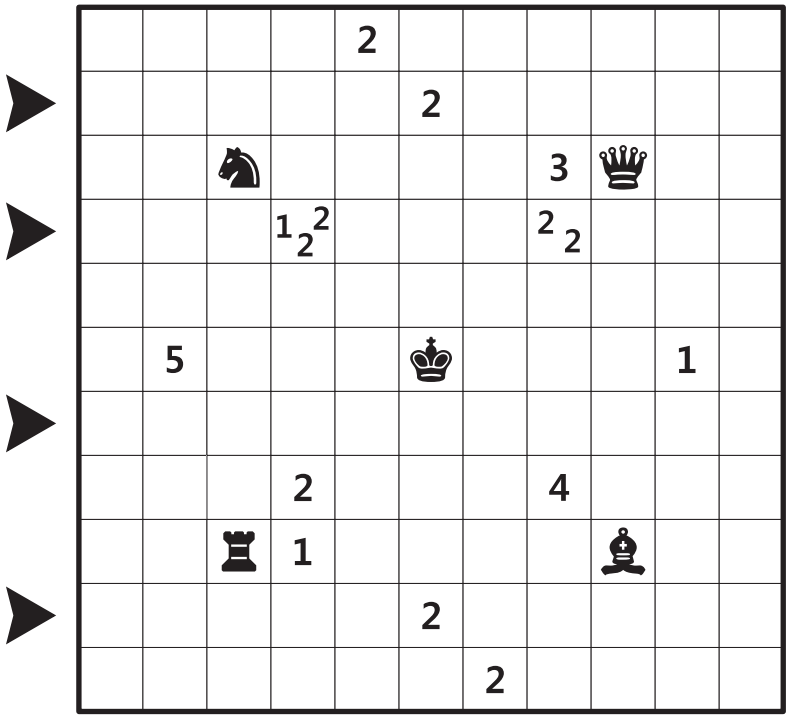


1 to 9

7. Tapa Chess - Puzzles and Chess - 42 POINTS - Nikola Zivanovic

Apply Tapa rules (See puzzle 1). There is no wall segment on chess pieces. Each chess piece attacks same number of painted cells.

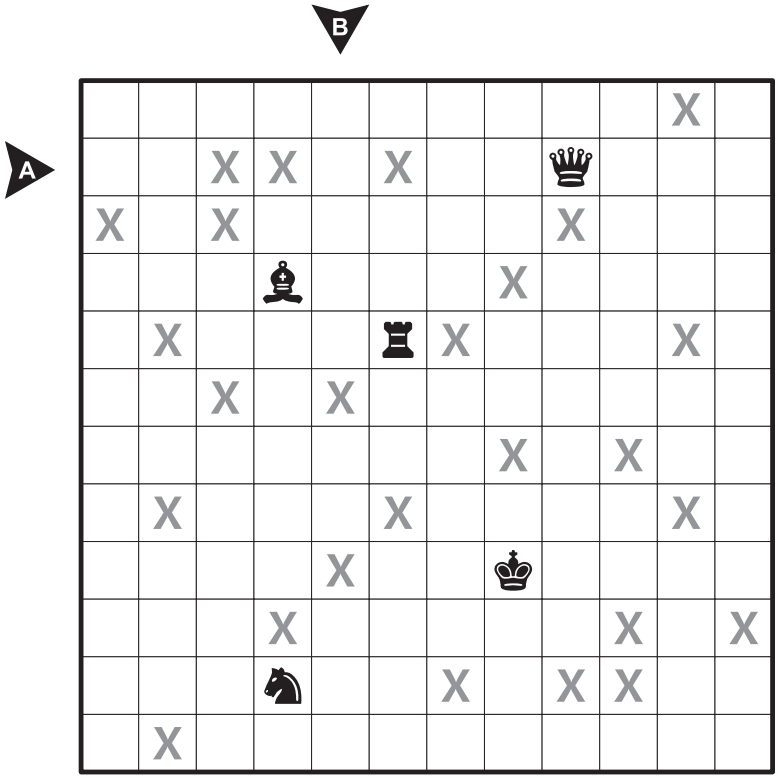
Answer Format: For each marked row, enter the number of cells in the longest continuous horizontal group belonging to the Tapa in that row, starting from the top and continuing to the bottom. For the example would be: 22



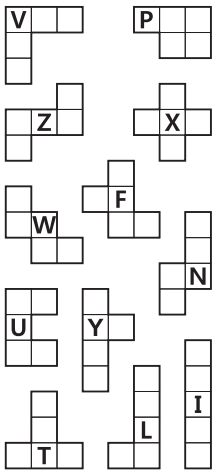
8. Penta Chess - Puzzles and Chess - 101 POINTS - Nikola Zivanovic

Place all 12 different pentominoes into the grid. Pentominoes cannot touch each other, even diagonally and they may be rotated and/or mirrored. Each chess piece attacks some pentominoes. The total number of attacked different pentominoes (not cells) for each chess piece is shown next to the grid. Pentominoes cannot be placed to the cells with the chess pieces and in the cell marked with „X"..
A pentomino could not cover the another one for queen's, rook's or bishop's movement.

Answer Format: Write the order of pentominoes in the marked rows/columns, from left to right or top to bottom. For the example would be: TI, NI



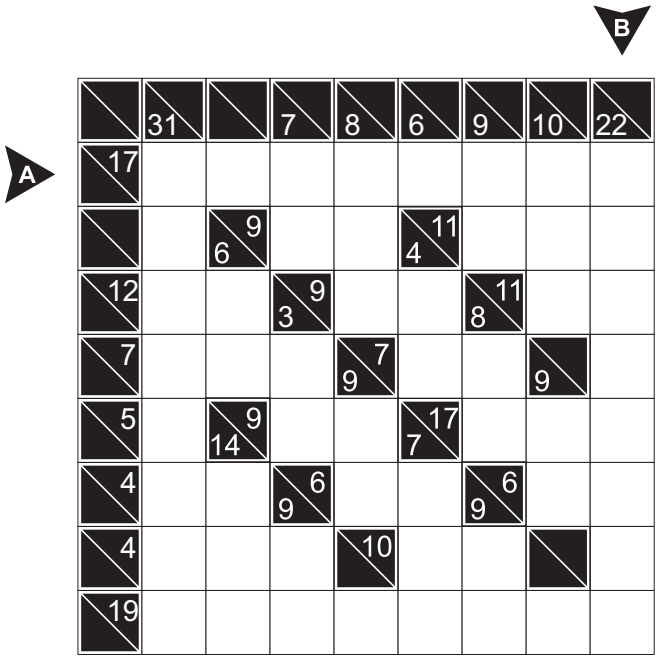
3
7
1
7
2



9. Gapped Kakuro - Puzzle Jackpot - 84 POINTS - Serkan Yürekli

Enter a single digit from 1 to 9 into each of the empty cells so that the sum of numbers in each Across and Down answer equals the value given to the left or above, respectively. No digit may repeat within a single answer. Some cells may remain empty, and empty cells cannot be adjacent.

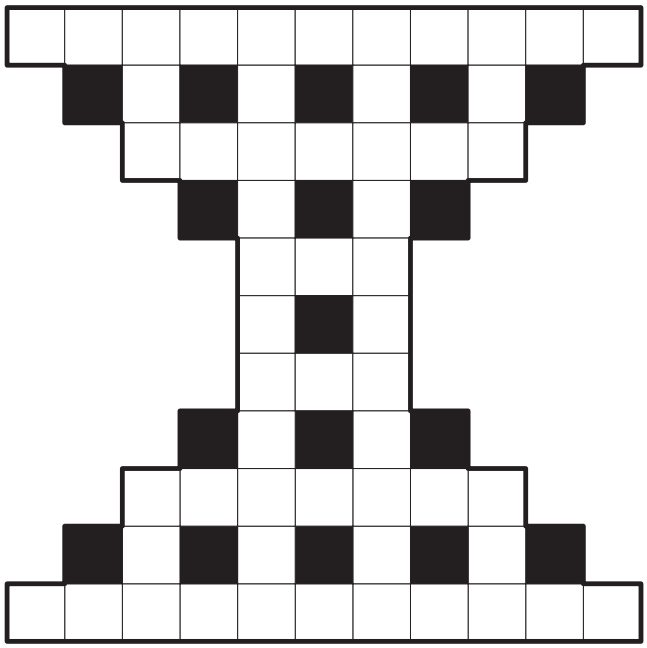
Answer Format: Write the contents of the marked rows/columns. Use E for empty cells. For the example would be: 61E324, 89E2EE3



10. Crisscross Crash - Puzzle Jackpot - 61 POINTS - Serkan Yürekli

Enter 32 of the 34 given words in the crisscross diagram reading Across or Down, one letter in each cell. When two or more entries share a row or column, each must overlap the next by exactly one letter.

Answer Format: Write the unused words in alphabetical order. For the example would be: SPAM



AGO
ARF
COO
COP
COZ
DUO

FLU
FUN
GOA
GUN
GUT
GYM
HAJ

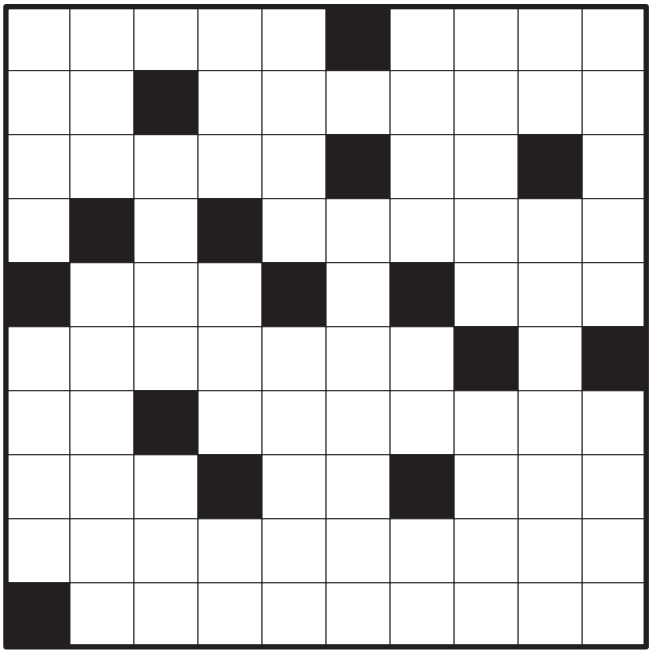
KID
KIN
LAV
MAD
MOO
NTH
OAK
OFF
OUR
OWN

RID
ROW
SIT
TWO
UGH
VAC
VIM
WHA
WHO
ZEK
ZIG

11. Yajilin / Akari - Melon's Puzzle Zoo - 38 POINTS - Palmer Mebane

Place lightbulbs in some cells. Each lightbulbilluminates every square in the four compassdirections, similar to a rook in chess, up to theedge of the grid or a black cell. All gridsquares must be illuminated, but no two lightbulbs can illuminate each other. Thendraw a single closed loop of horizontal andvertical segments passing through everysquare that is not black and does not containa lightbulb. Some black cells may contain anumber and arrow. For these cells, thenumber tells how many cells in the directionof the arrow are lightbulbs.

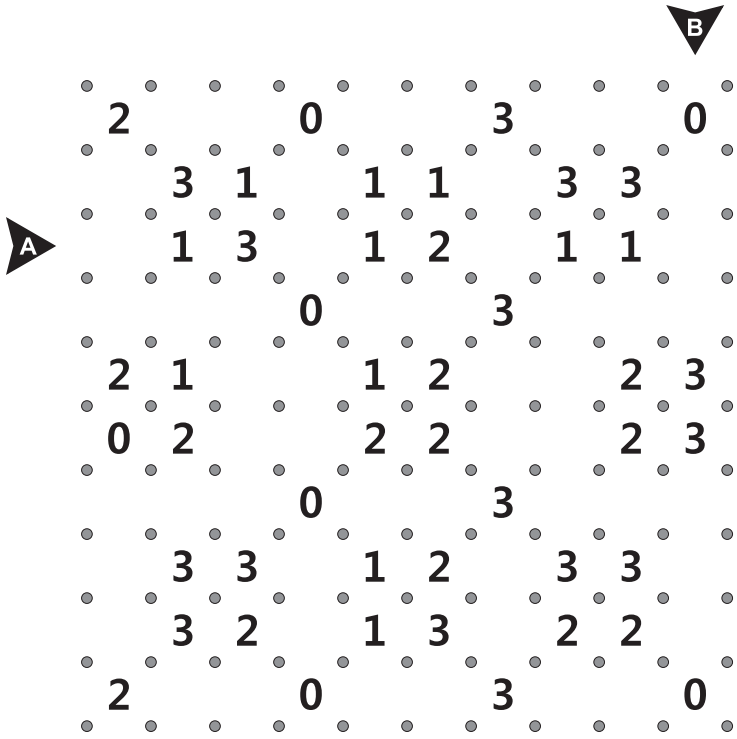
Answer Format: Enter the digits corresponding to the total number of lightbulbs in each columns from left to right. For the example would be: 212110



12. Liar Slitherlink - Melon's Puzzle Zoo - 83 POINTS - Palmer Mebane

Draw a single closed loop of horizontal andvertical segments passing through adjacentdots that does not intersect itself. A numbertells how many of the four adjacent edges ofthe square are part of the loop. Ignore theletters for the purposes of solving.Exactly one number in eachrow and column is false. It is part of solving to determine the liar clues.

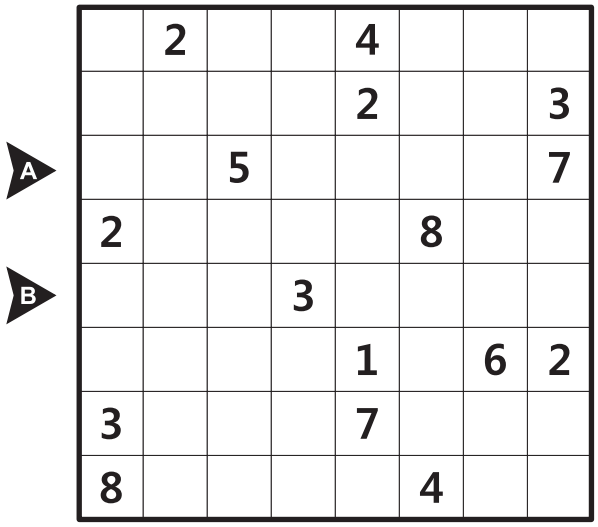
Answer Format: For the marked rows/columns, write the lengths of separate cell blocks that are inside the loop. For the example would be: 211, 11



13. Worm Sudoku - Hybrids - 64 POINTS - Bram de Laat

Place the digits 1-N once in each row and column. Also draw N worms of size N in the grid. Worms consist of a path or horizontally and vertically adjacent cells from head to tail. All cells are used. Worms can touch themselves. The heads and tails are indicated by the given digits. Each worm contains the digits 1-N exactly once.

Answer Format: Write the contents of the marked rows. For the example would be: 1576234, 5623471

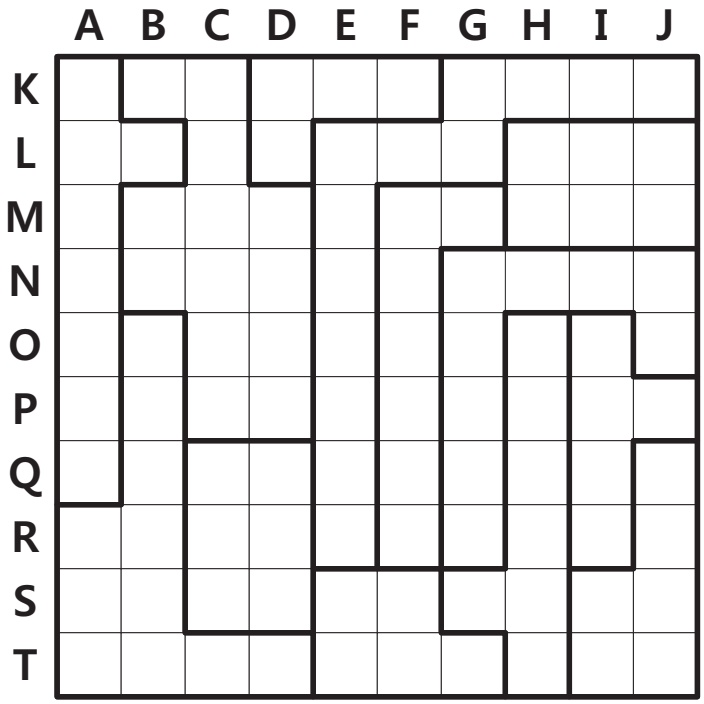


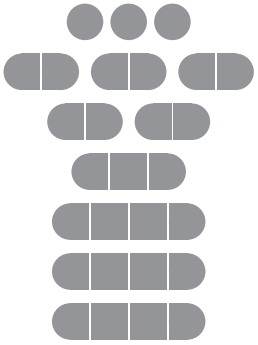
	2			4			
				2			3
		5					7
2					8		
			3				
				1		6	2
3				7			
8					4		

14. Sea Battle - Hybrids - 86 POINTS - Bram de Laat

Place the given fleet in the grid so that in every row, column and boldly marked area exactly 2 ships appear. Ships don't touch each other, not even diagonally. Ships may cross over bold lines.

Answer Format: Enter the rows and/or columns where the size 2 and 3 ships lie. For the example would be: GMR, ALP

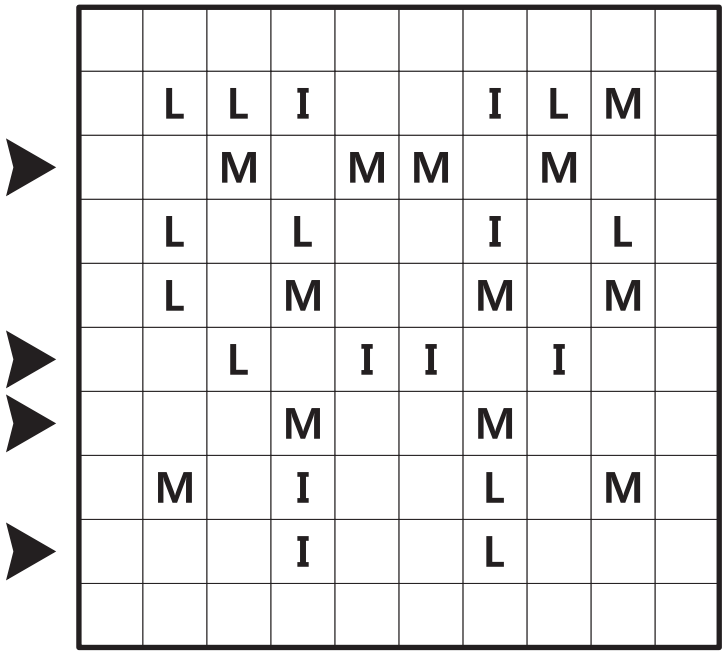




15. L & M & I - Twist - 48 POINTS - Deb Mohanty

Fill all cells with either L or M or I. All cells with L's must be connected to each other horizontally or vertically. Similar rule for M's and I's. No 2x2 region can contain all same letters.

Answer Format: Enter the number of 'M's in each of the marked rows, starting from top to bottom. For the example would be: 323



16. Toroidal Rectangles - Twist - 35 POINTS - Deb Mohanty

Divide the grid into rectangles so that each rectangle contains exactly one number, and so that each number represents the number of cells of its corresponding rectangle. Some of the rectangles may wrap-around the borders.

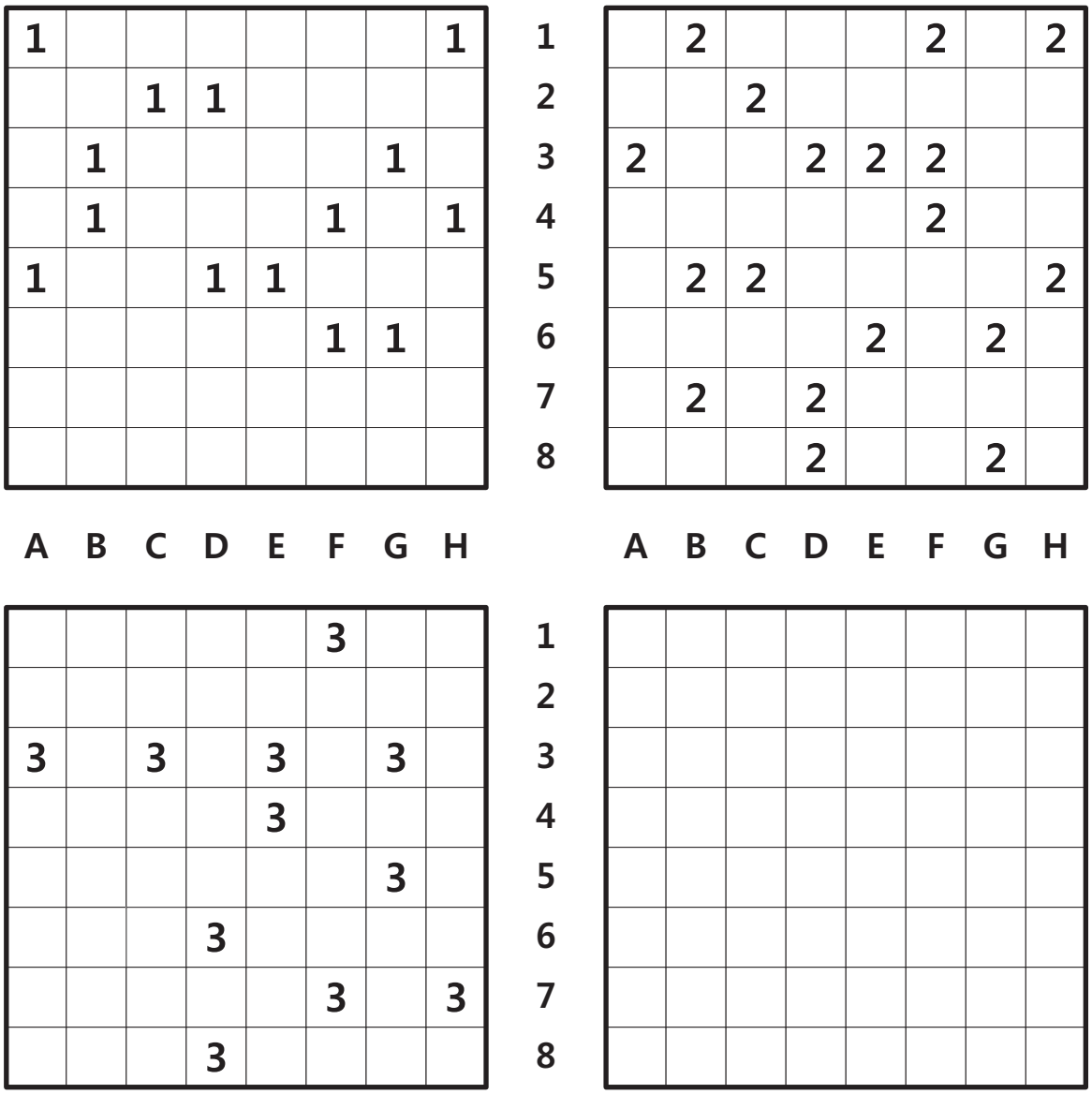
Answer Format: Alphabetically for each letter, enter the digit for the corresponding rectangle. For the example would be: 66246

4										
		3	A	5				9		2
6									B	
		4		2		12		3		6
	C			D						
E		4		4		2		9		F
6		4		2	G	6		4		
				H						4
3		9				3		2		I
									J	3

17. 4x4 Diamonds - MAYnipulation - 25/60/100 POINTS - Murat Can Tonta

Locate an equal amount of diamonds in each grid. Among the four grids, each coordinate must contain exactly one diamond. Clues indicate how many (vertical, horizontal and diagonal) neighbouring cells contain a diamond. Cells with clues are empty.

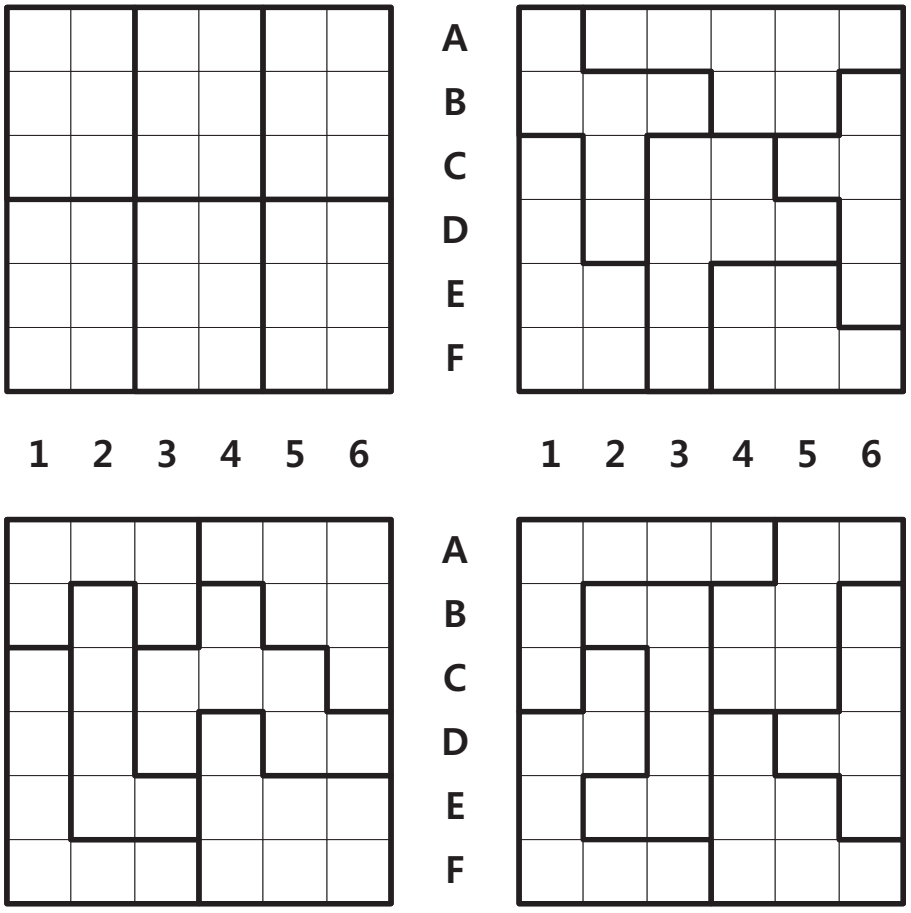
Answer Format: For each grid except bottom right, starting with the top row, enter the number of diamonds in each row. For the example would be: 0112, 2110, 1102.



18. Clone Battle - MAYnipulation - 33 POINTS - Murat Can Tonta

Place three (two for the example) stars in every row, column and outlined region. Cells with stars are allowed to touch. Grids have identical solutions.

Answer Format: For each row, enter the column number of the first star in the row. Then for each row, enter the column number of the last star in the row. For the example would be: 14312, 25534.

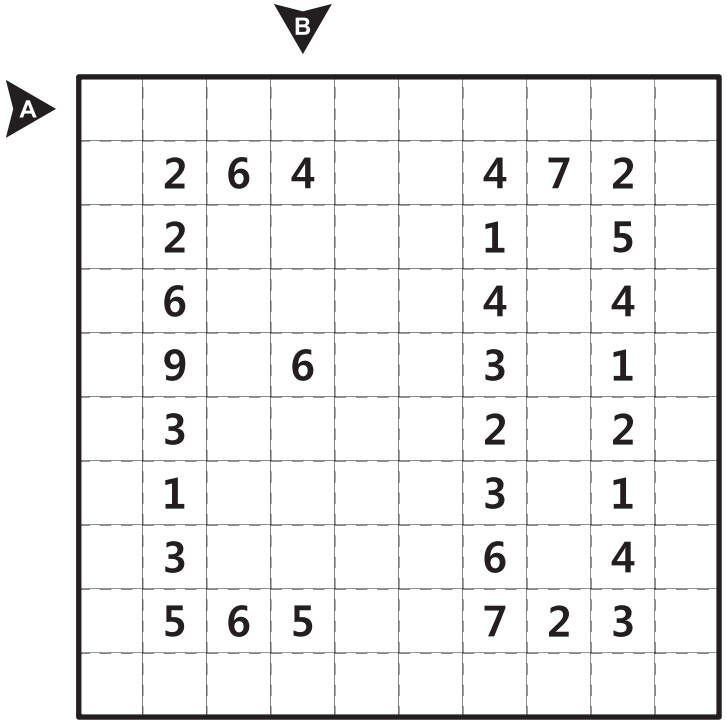


19. Even-Odd Fillomino - FillominoFillia - 97 POINTS - Grant Fikes & P. Mebane

Apply Fillomino rules. Divide the grid squares into polyominoesso that
1. Every number in the grid must becontained in a polyomino containingthat quantity of squares.
2. No two polyominoes containing the samequantity of squares may share an edge.
3. A polyomino may contain one, more thanone, or none of the numbers originally given.

Additionally, the odd numbersmust form a single polyomino, and the evennumbers must similarly form a single polyomino.

Answer Format: Enter the units digits of each square in the marked rows and columns, from left to right for rows and from top to bottom for columns. For the example would be: 34818, 35538



20. Greater-Than Fillomino - FillominoFillia - 71 POINTS - Grant Fikes & P. Mebane

Apply Fillomino rules. (See previous puzzle)

Additionally, Each ">" sign must point from alarger polyomino to a smaller one.

Answer Format: Enter the units digits of each square in the marked rows and columns, from left to right for rows and from top to bottom for columns. For the example would be: 73225, 77775