



MARATHON

ONE WEEK · MANY PUZZLES · HUGE SIZES

**AUTHORS FOR
PUZZLE MARATHON
2014**

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ABOUT THE TEST

This is a differently designed LMI test.

- All puzzle grids in this test are marathon grids, i.e. they are much bigger in size than usual.
- There is no *fixed* time limit for any puzzle. The challenge for solvers is to solve all of them in least amount of time.
- The test will be open for more than a week, with the idea that everyone can get around to solve all puzzles conveniently.
- Each puzzle can be started, solved and submitted independent of others, and in any order, anytime during the week.

SCORING

Each puzzle is worth 50 points. A correct submission for a puzzle will be awarded with 50 points. Additionally bonus points will be awarded for submitting a puzzle correctly within an hour. The bonus points rules are same as 2013. See this post <http://logicmastersindia.com/forum/forums/thread-view.asp?pid=10054> for details.

There are 10 puzzles. Total score for a player will be computed by summing individual puzzle scores. For players who submit more than 8 puzzles correctly, their best 8 results will be considered for ranking.

INSTANT GRADING

Instant Grading is built-in in this test, which means no player will get 0 for solving the big puzzle correctly, but making an error while keying the answer. Each submission will be marked as “correct” or “wrong”.

Following penalty rules will be applicable for wrong submissions

- 1.5 minutes will be added to your final submission time for each of the first two wrong submissions
- 3 minutes will be added to your final submission time for each of the subsequent wrong submissions

Note that there is no penalty to the fixed 50 points, in case of wrong submissions.

PUZZLE PDFS

Each puzzle will have a separate password protected pdf, the passwords being different from each other. All pdfs will be available to download hours before the test starts. Since the grids are large, they will not include the example grids.

NOTES ABOUT ANSWER KEYS

- 1) Please note that each answer key is of “fixed length”. That means if red warning is displayed while submitting, the submission can never be correct.
- 2) All circled cells follow left to right direction.
- 3) All arrow marks follow top to bottom and, then left to right direction
- 4) If both rows and columns are marked, row answer key need to be entered first
- 5) **If any row/cell has a double digit answer key, only the unit (right-most digit) digit should be entered. (This rule is applicable to Araf, Yajilin, Heyawake, Turning Fences, Scrabble, MiniCoral).**

PUZZLE SORTING IN SUBMISSION PAGE

The puzzles will be ordered based on difficulty in the submission page. The top puzzle will be easiest and the bottom puzzle will be more difficult than any other puzzle. However, your personal experience may differ.

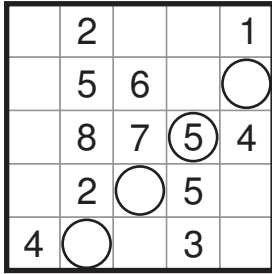


ARAF

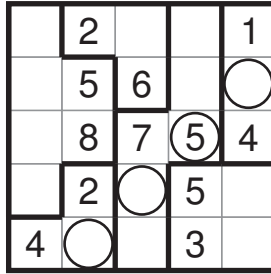
Divide the grid into some regions formed of adjacent squares. Each region should contain exactly two given numbers. The size of each region should be a value (in unit squares) between the two numbers inside that region. Some regions may be drawn.

(Ignore the circles while solving)

Answer key: For each circled cell from left to right, enter the size of region the cell belongs to. For the example, the answer key is 3663.



○ ○ ○ ○



○3 ○6 ○6 ○3

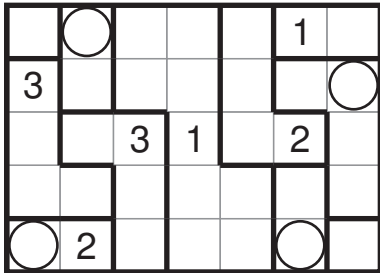


NANRO

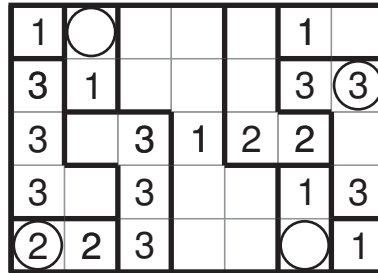
Write numbers in some of the cells. All numbers in a region must be same. The given number in a region denotes how many cells in this region contain a number (at least one). Same numbers must not be orthogonally adjacent across region boundaries. Numbered cells must not cover an area of size 2x2 or larger. All numbered cells must form a single orthogonally continuous area.

(Ignore the circles while solving)

Answer key: Enter the digits in circled cells from left to right. Enter X for blank cells. For the example the answer key is 2XX3



○ ○ ○ ○



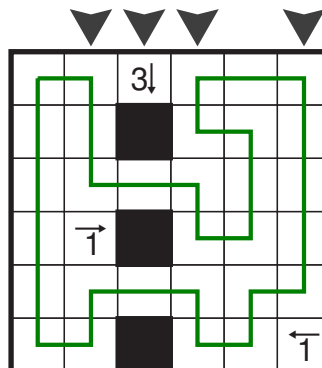
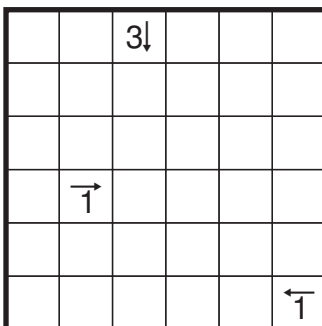
○2 ○X ○X ○3



YAJILIN

Shade some white cells and then draw a single closed loop through all remaining white cells. Shaded cells cannot share an edge with each other. Cells with numbered arrows are not part of the loop. Numbered arrows indicate the total number of shaded cells that exist in that direction in the grid.

Answer key: For each marked row, enter the lengths of the longest horizontal loop segment. For the example, the answer key is 2014

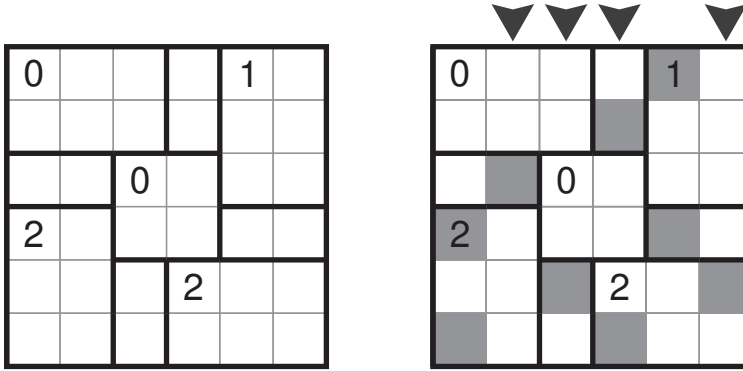




HEYAWAKE

Shade in some cells in the grid. The grid is divided up into rooms – if a room has a number in it, there should be the corresponding number of shaded cells within the room. Shaded cells must not be horizontally or vertically adjacent, and the remaining white cells should be connected to each other via horizontal or vertical paths. However, the white cells must not exceed 2 rooms in a straight line.

Answer key: For each marked column from left to right, enter the number of shaded cells. For the example, the answer key is 1121

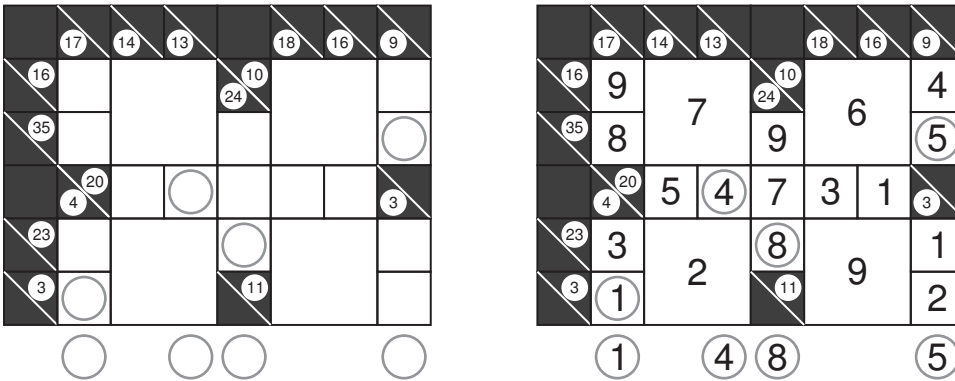


KAKUR-OH

Place numbers 1-9 into each cell. The sum of all cells in a row is given at the left and the sum of all cells in a column is given at the top. No numbers may repeat in a single sum. Some squares cover a 2x2 area.

(Ignore the circles while solving)

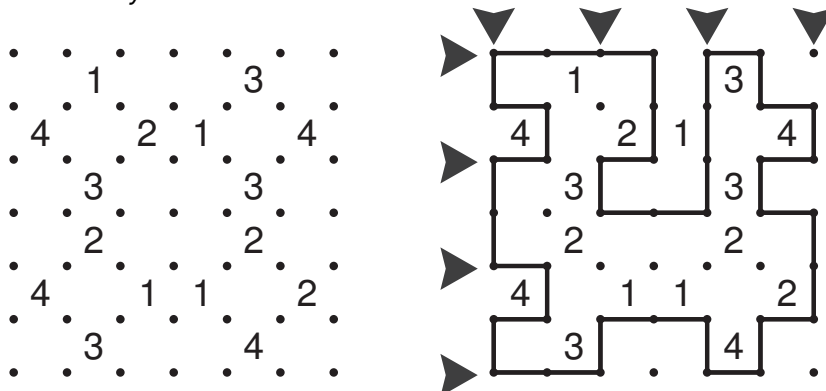
Answer key: Enter the digits in circled cells from left to right. For the example, the answer key is 1485



TURNING FENCES

Draw a closed loop by connecting dots horizontally and vertically. The numbers in the grid indicate the amount of turns taken on the four dots around it.

Answer key 1: For each marked row, enter the lengths of the longest horizontal loop segment. For the example, answer key is 3112
Answer key 2: For each marked column, enter the lengths of the longest vertical loop segment. For the example, answer key is 2132





4X4 SUDOKU

Apply classic Sudoku rules to individual grids: place the digits 1 through 6 into the empty cells in the grid so that each digit appears exactly once in each of the rows, columns, and bold outlined boxes.

4X4 SUDOKU

Additionally if two grids are shading an edge, the digits along the edges must be same.

(Ignore the circles while solving)

Answer key: Enter the digits in circled cells from left to right. For the example, the answer key is 14623264

○					
					2
		○		1	4
			5	6	
		3	4		
	1	2			

					○
2					
4	5		○		
	4	2			
		6	4		
			1	4	

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

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

	1	2			
		3	4	○	
			5	6	
				1	4
					6
	○				

			1	4	
	○	2	4		
	2	4			
4	1				
6					
				○	

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

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

○ ○ ○ ○

○ ○ ○ ○

○1 ○4 ○6 ○2

○3 ○2 ○6 ○4