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# Japanese Puzzle Land

## Instruction Booklet

20/21 August 2011  
100 minutes

### About this test

(1) "**Puzzle Communication Nikoli**" is a Japanese puzzle magazine started in 1980 (see <http://www.nikoli.co.jp/en/> for Nikoli official website). A lot of puzzles were born in this magazine via readers' contributions, some of which (Slitherlink, Shikaku, etc.) are now regarded as "classic" in worldwide puzzle competitions like WPC. In this test, we would like participants to enjoy their beauty and depth. There are 25 puzzles from 13 different types.

**Important: This is NOT a Nikoli official test.**

- **Puzzle types used in this test are developed and popularized by Nikoli.** The only exception is Yajilin+. This variant is invented by Yosuke Imai for this test.

- **Nikoli has nothing to do with puzzles used in this test.**

(2) Some puzzle types may be unfamiliar to most participants:

1. **Shakashaka** (2008 - ) is a relatively new puzzle.
2. **Mochikoro** (2002 - 2006) has already disappeared from Nikoli magazines.
3. **Yajilin+** is the only variant in this test.

So, this booklet includes some practice puzzles for these types. We believe these will help you learn basic solving techniques.

(3) Some of the Nikoli famous puzzles (Nurikabe, Ripple Effect, etc.) are not included in this test. We decided not to include them considering the amount/balance of puzzles.

(4) We are grateful to LMI for giving us such an opportunity and hosting this test.

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Hideaki Jo 條秀彰

Puzzle	Size	Points
Sudoku	9x9	15
Kakuro	19x11	16
	9x9	32
Fillomino	10x10	14
	18x10	25
Numberlink	10x10	12
	15x15	32
Slitherlink	18x10	17
	25x15	30
Masyu	10x10	12
	24x14	29
Heyawake	10x10	12
	24x14	28
Akari	10x10	5
	24x14	20
Shikaku	18x10	8
	24x14	18
Hitori	12x12	20
	12x12	28
Shakashaka	10x10	18
	10x10	31
Mochikoro	10x10	15
	17x17	37
Yajilin+	10x10	16
	15x15	40
	<b>Total</b>	<b>530</b>

 **5 points per full minute saved if all 25 puzzles are solved correctly.**

# Sudoku

9x9 ···· **15** points

**Rule:** Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined 3x3 region.

4				A		7	8
3		8				6	2
5		2		6		4	1
		9	8		2	5	
B							C
		5	7		1	2	
9		1		4		3	5
2		7				8	6
6	3		D				7

4	1	6	5	2	3 <sub>A</sub>	9	7	8
3	9	8	1	7	4	6	5	2
5	7	2	9	6	8	4	3	1
7	6	9	8	3	2	5	1	4
1 <sub>B</sub>	2	3	4	5	6	7	8	9 <sub>C</sub>
8	4	5	7	9	1	2	6	3
9	8	1	6	4	7	3	2	5
2	5	7	3	1	9	8	4	6
6	3	4	2 <sub>D</sub>	8	5	1	9	7

**Answer Key:** Enter the digits in shaded cells in alphabetical order.  
For the example, the answer is "3192".

# Kakuro

19x11 ···· **16** points  
9x9 ···· **32** points

**Rule:** Place a digit from 1 to 9 in each empty cell so that the sum of the digits in each horizontal/vertical group of cells equals the number given on its left/top. No digit may repeat within a single sum.

**Note:** First puzzle is a Big-Easy one and second puzzle is a Small-Difficult one. Points table is not wrong.

3	21	20	14	29	22	23	10	8
4		29				24		
3		6	30		A	7		
6	B		16	30			22	8
9	12		17	20	14	29		
10		30	10		23	16	3	3
29			14		7	4		
16	17	30		3	7		C	12
23			15				4	
24			D				16	

3	21	20	14	29	22	23	10	8					
4	1	3	29	9	8	5	7	24	9	8	7		
3	2	1	6	30	8	6	7	9 <sub>A</sub>	24	7	4	2	1
6	2 <sub>B</sub>	1	3	16	30	9	6	8	7	22	8		
9	12	4	5	17	20	14	29	9	8	5	7		
10	4	6	10	3	7	23	16	9	7	3	3	2	1
29	8	5	7	9	10	14	9	5	7	4	1	3	
16	17	30	9	8	6	7	3	7	1	2	4 <sub>C</sub>	12	
23	9	8	6	15	1	8	2	4	4	1	3		
24	7	9	8	11	3	5	1	2	16	7	9		

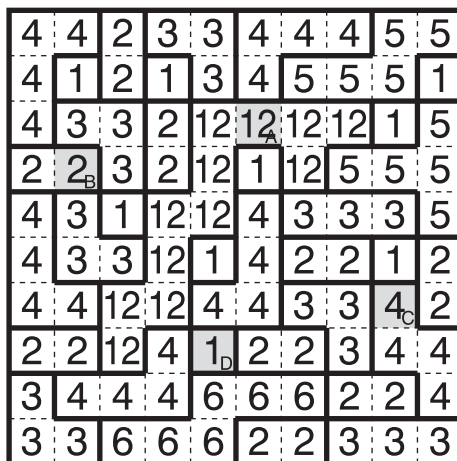
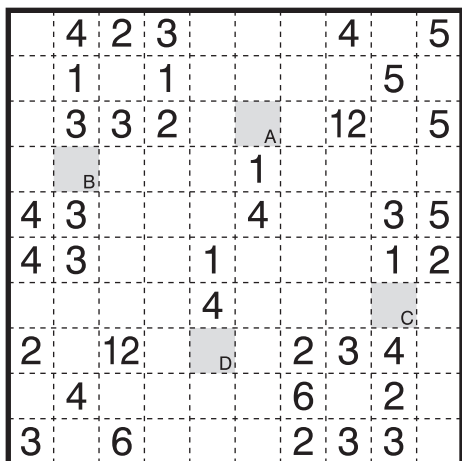
**Answer Key:** Enter the digits in shaded cells in alphabetical order.  
For the example, the answer is "9241".

# Fillomino

10x10 ···· **14** points  
18x10 ···· **25** points

**Rule:** Divide the grid into polyominoes (figures formed by joining some squares edge to edge) so that each given number represents the size of polyomino that contains it. No two polyominoes of the same size can share an edge.

**Note:** Each polyomino can contain any amount (0, 1 or more) of given numbers.

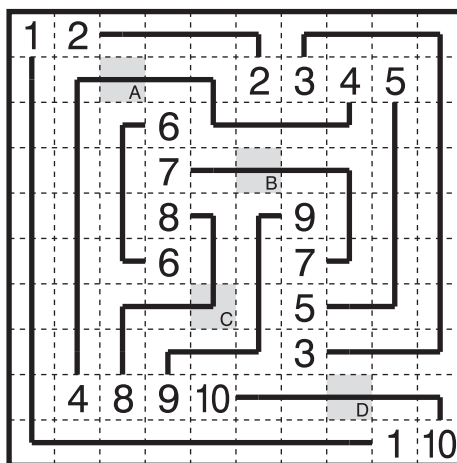
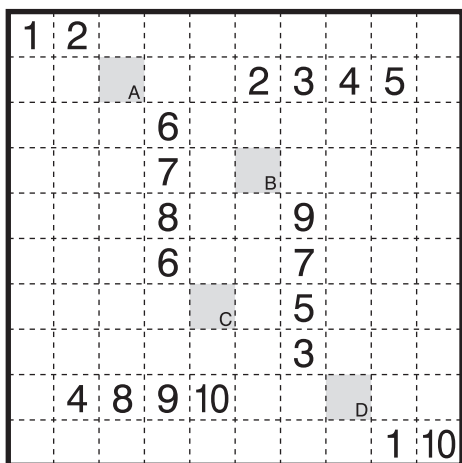


**Answer Key:** Enter the size (only the last digit for 2-digit number) of polyomino that contains each shaded cell in alphabetical order. For the example, the answer is "2241".

# Numberlink

10x10 ···· **12** points  
15x15 ···· **32** points

**Rule:** Connect pairs of the same numbers with a continuous line that goes through edges of white cells horizontally or vertically. Each cell belongs to at most one line.

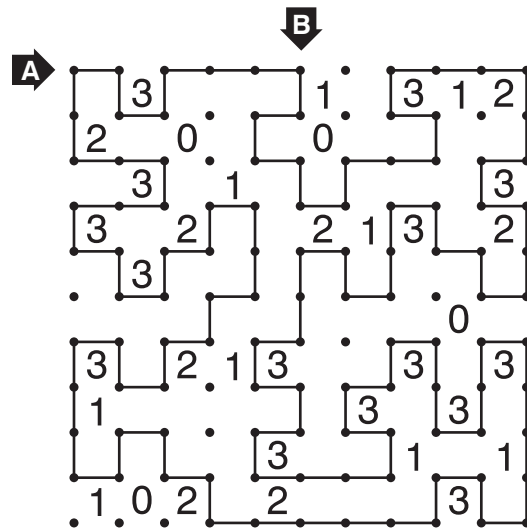
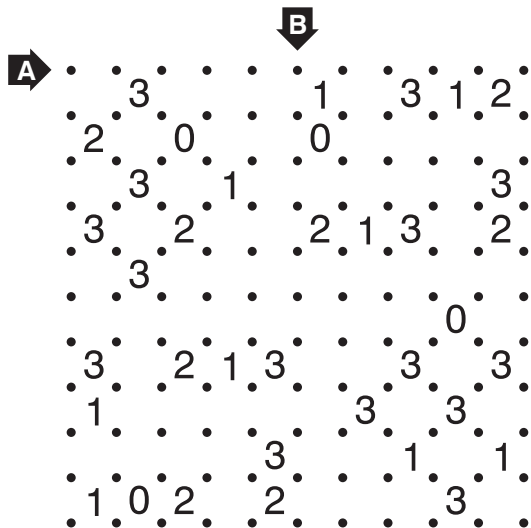


**Answer Key:** Enter the corresponding number (only the last digit for 2-digit number) for each shaded cell in alphabetical order. If some of the shaded cells are not used by any lines, enter "X" for such cells. For the example, the answer is "4780".

# Slitherlink

18x10 ..... 17 points  
 25x15 ..... 30 points

**Rule:** Draw a single closed loop which connects some of the dots horizontally or vertically.  
 The loop cannot touch or cross itself. Numbers indicate how many edges of that cell are used by the loop.

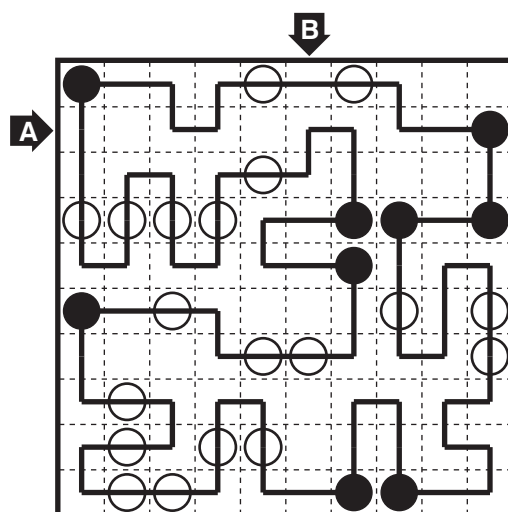
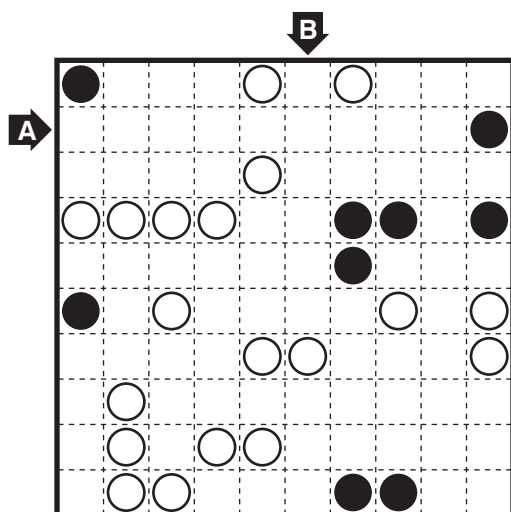


**Answer Key:** Enter the lengths of line segments along the marked arrows.  
 For the example, the answer is "133, 1121". (Enter "0" for rows/columns with no line segments.)

# Masyu

10x10 ..... 12 points  
 24x14 ..... 29 points

**Rule:** Draw a single closed loop passing through the centers of orthogonally adjacent cells.  
 The loop cannot touch or cross itself and must visit all circles. The loop goes straight at white circles, but makes a 90 degree turn in at least one of the adjacent cells. The loop makes a 90 degree turn at black circles, but cannot make a turn immediately before or after.

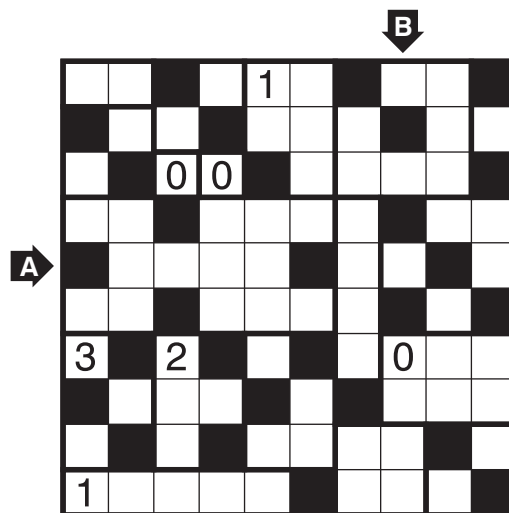
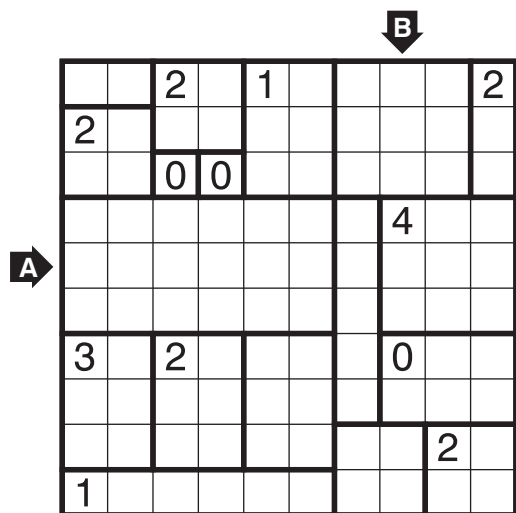


**Answer Key:** Enter the lengths of line segments in the marked rows and/or columns.  
 For the example, the answer is "112, 1". (Enter "0" for rows/columns with no line segments.)

# Heyawake

10x10 ···· **12** points  
24x14 ···· **28** points

**Rule:** Blacken some cells so that all remaining cells must be connected orthogonally. No two black cells can share an edge. Any single horizontal or vertical line of white cells cannot traverse more than one thick line. Numbers indicate the amount of black cells in that region.

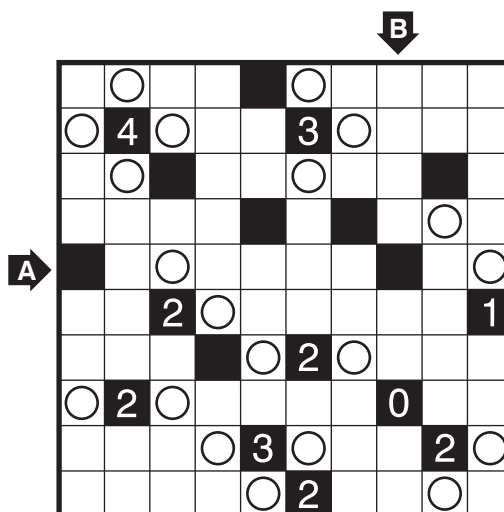
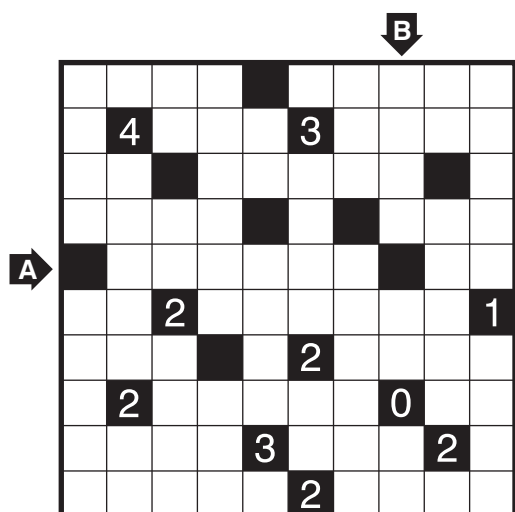


**Answer Key:** Enter the amount of black cells in the marked rows and/or columns.  
For the example, the answer is "3, 3".

# Akari

10x10 ···· **5** points  
24x14 ···· **20** points

**Rule:** Place lightbulbs in some of the white cells so that all white squares are illuminated. Lightbulbs illuminate all squares they can see horizontally and vertically. They are blocked by black cells or the edge of the grid. No two lightbulbs may illuminate each other. Numbers in black cells indicate how many orthogonally adjacent cells contain a lightbulb.

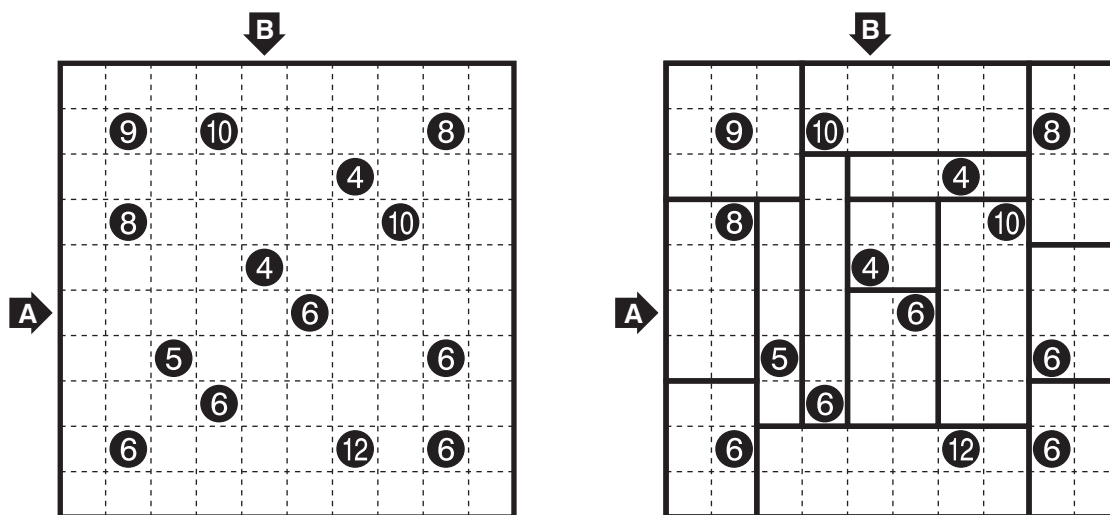


**Answer Key:** Enter the amount of lightbulbs in the marked rows and/or columns.  
For the example, the answer is "2, 0".

# Shikaku

18x10..... **8** points  
 24x14..... **18** points

**Rule:** Divide the grid into rectangles (including squares) so that each rectangle contains exactly one number. Each number represents the area (number of squares) of its corresponding rectangle.

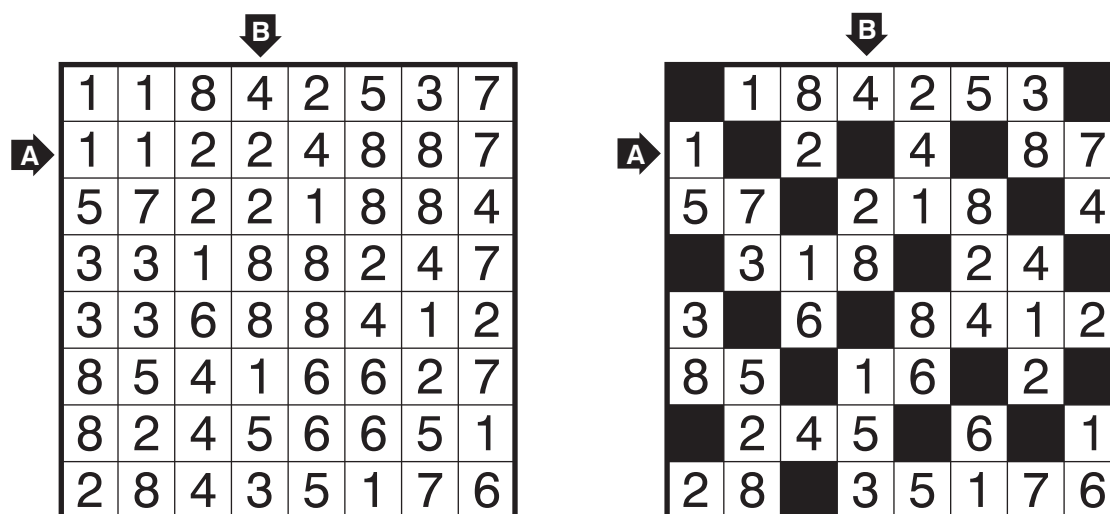


**Answer Key:** Enter the amount of rectangles (including squares) in the marked rows and/or columns.  
 For the example, the answer is "6, 5".

# Hitori

12x12..... **20** points  
 12x12..... **28** points

**Rule:** Blacken 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.

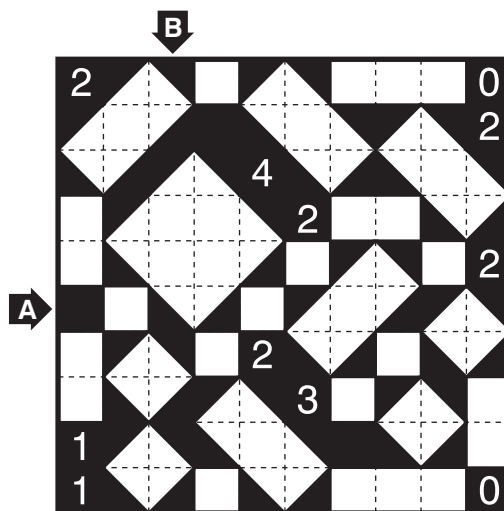
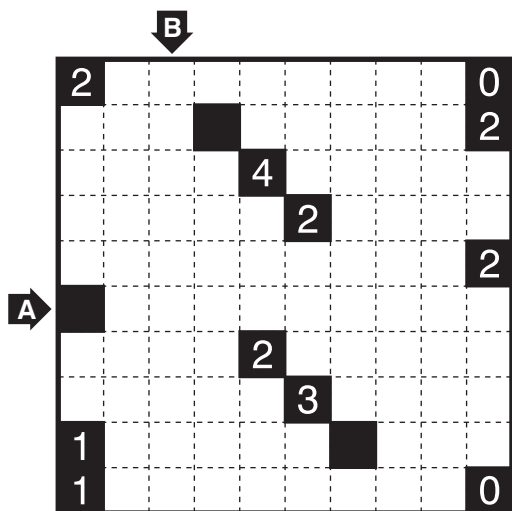


**Answer Key:** Enter the amount of black cells in the marked rows and/or columns.  
 For the example, the answer is "3, 2".

# Shakashaka

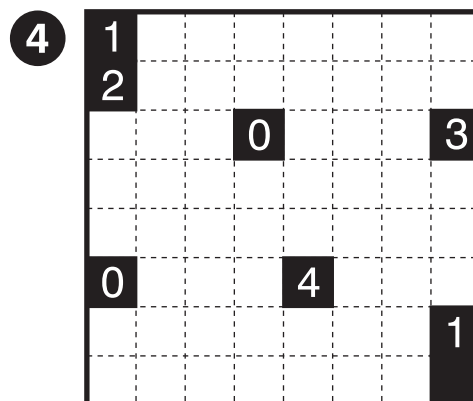
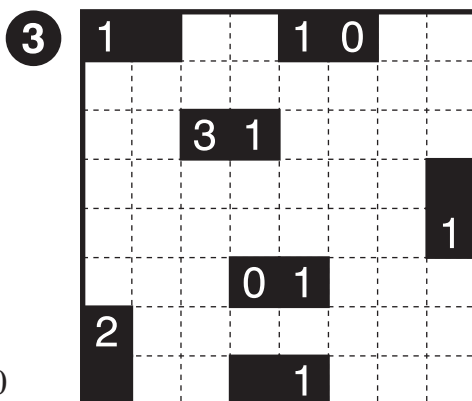
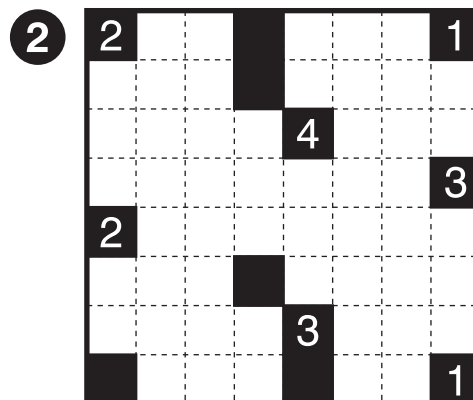
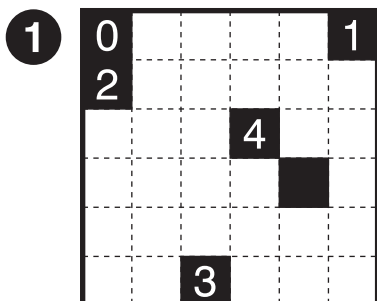
10x10..... 18 points  
 10x10..... 31 points

**Rule:** Place one of the four isosceles right triangles (▲, ▼, ◀ or ▶) in some white cells.  
 Every contiguous white region must be a rectangle (including a square).  
 Numbers indicate how many triangles are adjacent to the cell by sides.



**Answer Key:** Enter the amount of black triangles you placed in the marked rows and/or columns.  
 For the example, the answer is "6, 8".

## Practice Puzzles

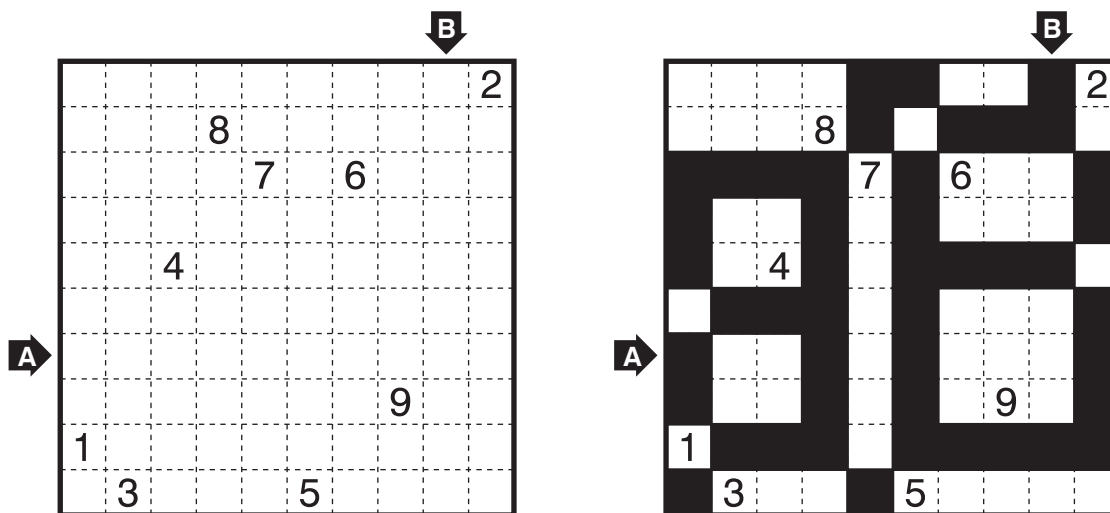


Solutions → P.10

# Mochikoro

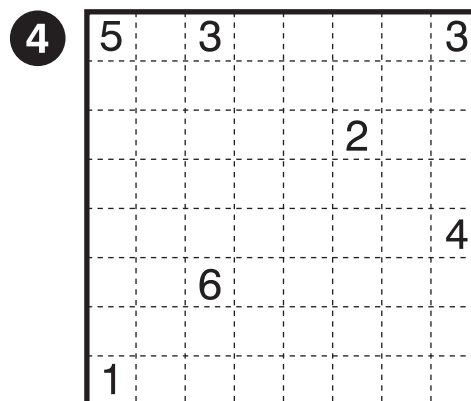
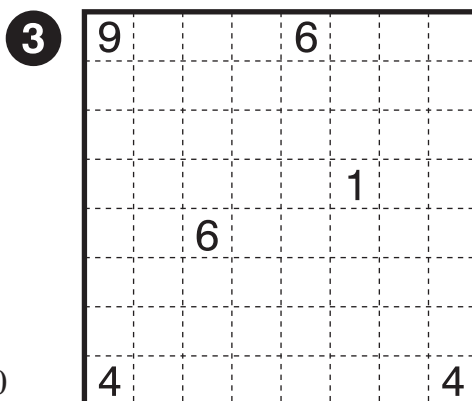
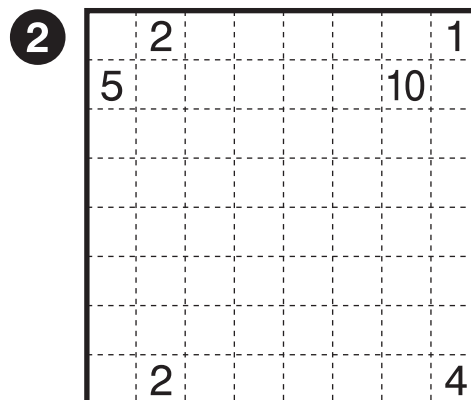
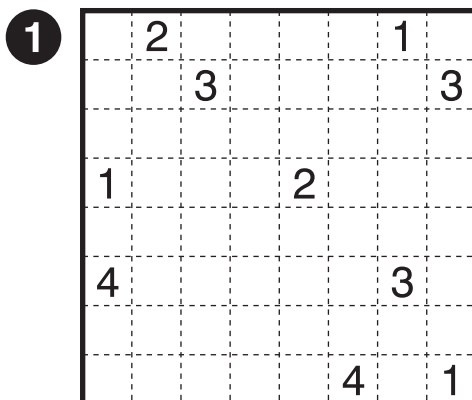
10x10..... **15** points  
 17x17..... **37** points

**Rule:** Blacken some cells so that every contiguous region of remaining cells must be a rectangle (including a square). All rectangles must be connected diagonally and there are no 2x2 area of black cells. Each rectangle contains at most one number, which represents the area (number of cells) of its corresponding rectangle. Cells with a number cannot be blackened.



**Answer Key:** Enter the amount of black cells in the marked rows and/or columns.  
 For the example, the answer is "4, 4".

## Practice Puzzles



Solutions → P.10

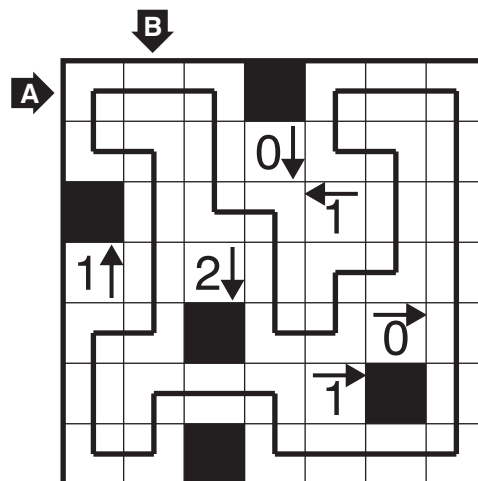
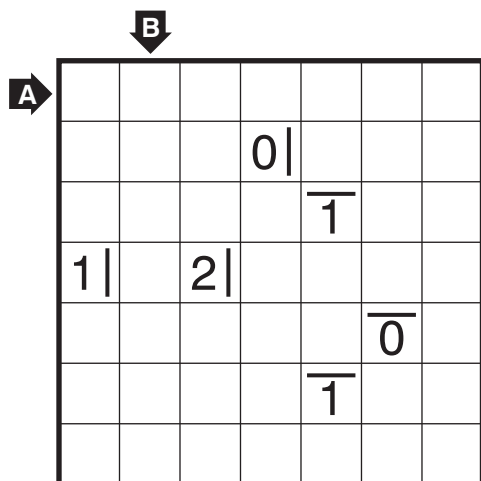


# Yajilin+

10x10 ..... 16 points  
 15x15 ..... 40 points

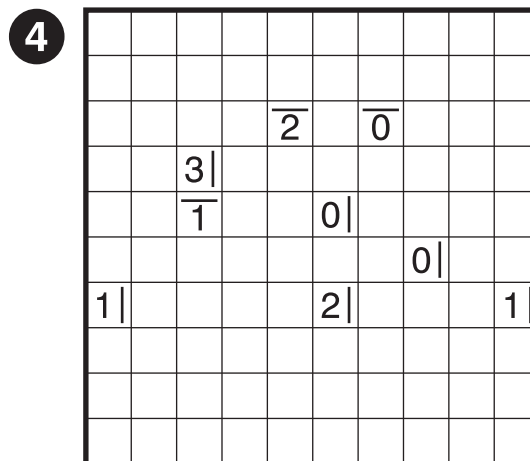
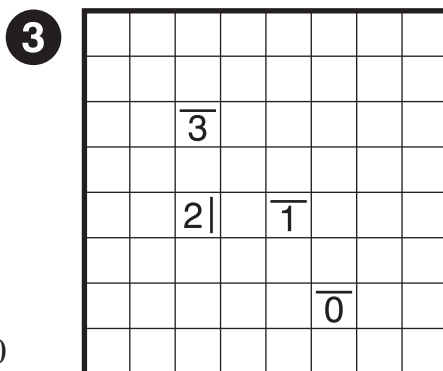
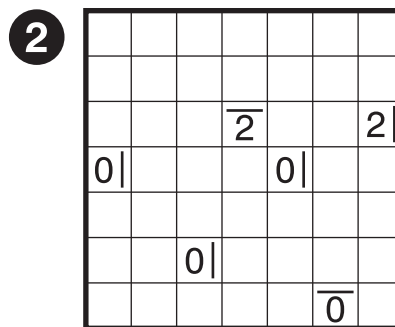
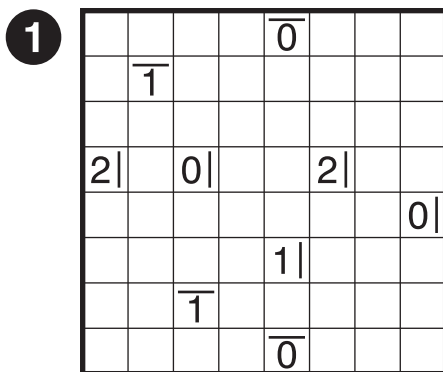
**Rule:** Draw a single closed loop passing through the centers of orthogonally adjacent cells. The loop cannot touch or cross itself. Cells not used by the loop must be blackened, and no two black cells can share an edge. Numbers indicate the amount of black cells in at least one of the two possible directions (horizontal lines can point either left or right, and vertical lines can point either up or down).

**Note:** In classic Yajilin, directions of arrows are completely given. In this variant, determining directions is part of solving.



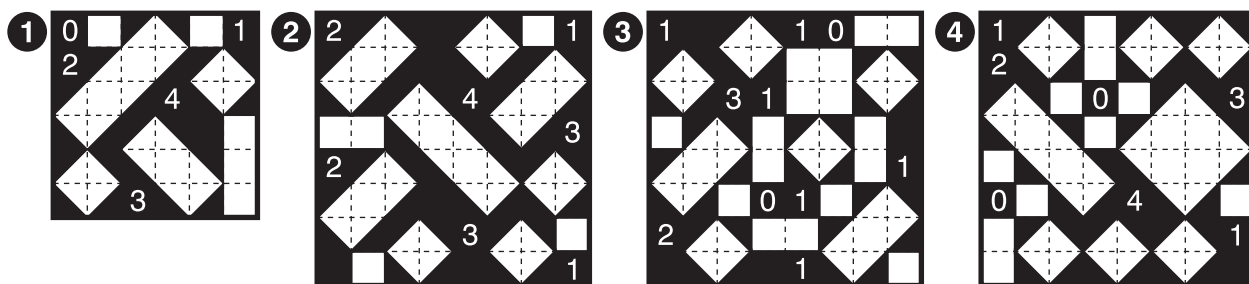
**Answer Key:** Enter the lengths of line segments in the marked rows and/or columns.  
 For the example, the answer is "22, 31". (Enter "0" for rows/columns with no line segments.)

## Practice Puzzles

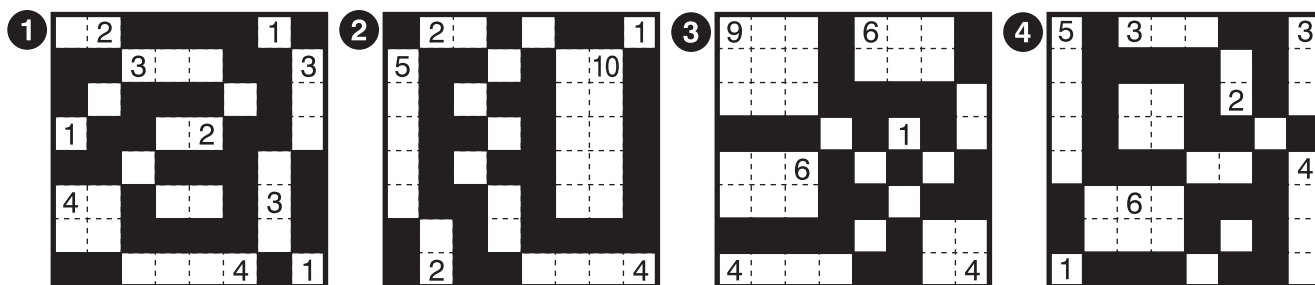


Solutions → P.10

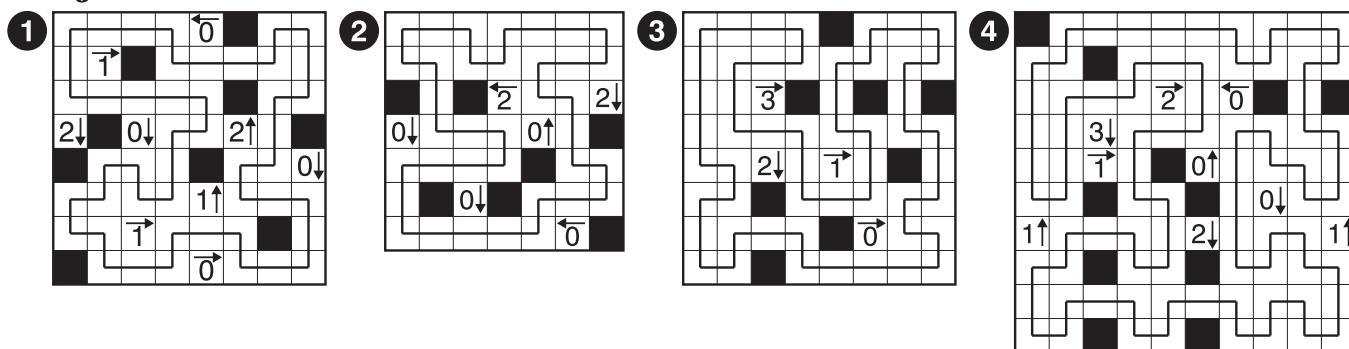
## Shakashaka



## Mochikoro



## Yajilin+



## History Table

<b>Numberlink</b>	Nikoli #17 (Apr/1987)	野木一生
<b>Slitherlink</b>	Nikoli #26 (Jun/1989)	⑤+ 矢田レーニン+ 轟由紀
<b>Shikaku</b>	Nikoli #27 (Sep/1989)	安福良直
<b>Hitori</b>	Nikoli #29 (Mar/1990)	たけゆたか
<b>Heyawake</b>	Nikoli #39 (Sep/1992)	福嶋啓之
<b>Fillomino</b>	Nikoli #47 (Feb/1994)	すらんた
<b>Yajilin</b>	Nikoli #86 (Jun/1999)	猫山天歩
<b>Masyu</b>	Nikoli #90 (Mar/2000)	矢野龍王+アセットニトリル
<b>Akari</b>	Nikoli #95 (Jun/2001)	あさおきたん
<b>Mochikoro</b>	Nikoli #100 (Sep/2002)	けんじゃ
<b>Shakashaka</b>	Nikoli #123 (Jun/2008)	Guten
<hr/>		
<b>Hashi</b>	Nikoli #31 (Sep/1990)	れーにん
<b>Nurikabe</b>	Nikoli #33 (Mar/1991)	れーにん
<b>Bag (Corral)</b>	Nikoli #60 (Apr/1996)	ゲサクですよ
<b>Ripple Effect</b>	Nikoli #73 (May/1998)	ゲサク