

LMI Monthly test

ANSWERS

26th - 28th May 2012

Timing

120minutes

Expected time 110

Points Table

Total: 850pts

Curve data	1	20pts
75pts	2	55pts
Trio cut	1	35pts
100pts	2	65pts
No numbers field	1	35pts
100pts	2	65pts
It's yours	1	40pts
105pts	2	65pts
Synchronized Maze	1	25pts
105pts	2	80pts
No numbers loop	1	50pts
145pts	2	95pts
B&W Matchmaker	40pts x5 + 20pts	
220pts	(5 puzzle grids + Non used grid)	

prepare 5

1

6

3

4

3

6

3

5

1

12

7

21

determine 5

Masyu 3

B&W 4

S&M 5

Not alone 4

Signal loop 2

submit 10

Author

Xevs (Ko Okamoto)

Test solvers

gorogoro
POTS

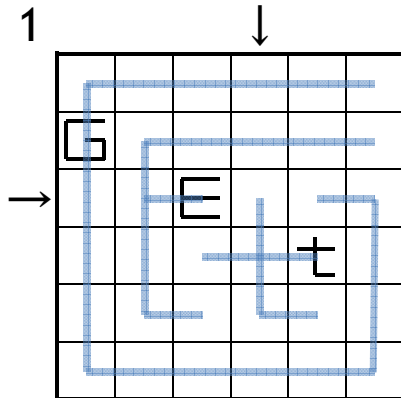
Curve data

20 + 55 pts

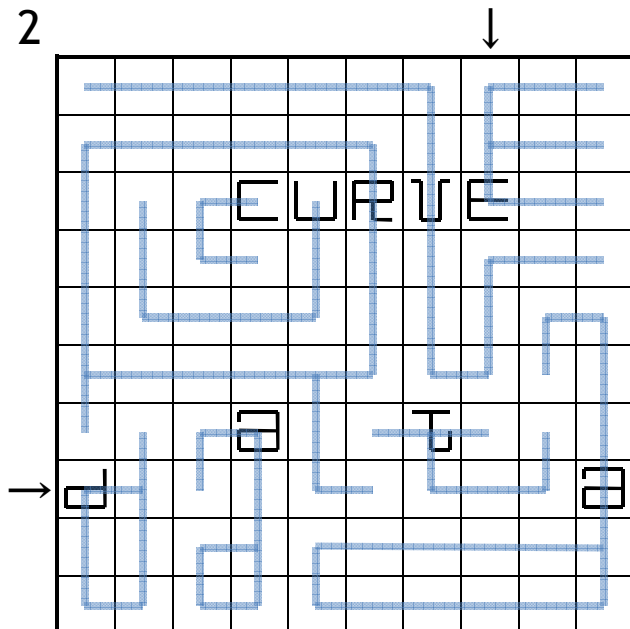
Make some figures by drawing lines so that each figure goes through just one clue. All the cells will be visited by lines. Each clue shows how the lines of the figure upon it turns or connects without any rotation or reflection. (The clues do NOT imply lengths of any part of the line)
Different figures do not share same cell.

Answer Key

Enter the lengths of line segments along the marked row or column.
Enter "0" for row/column with no line segments.



Key: 11, 2



Key: 112, 22

R's placement is very limited by V's shape.
Hollows (top left of "d" and bottom left of "t")
take very important roles.

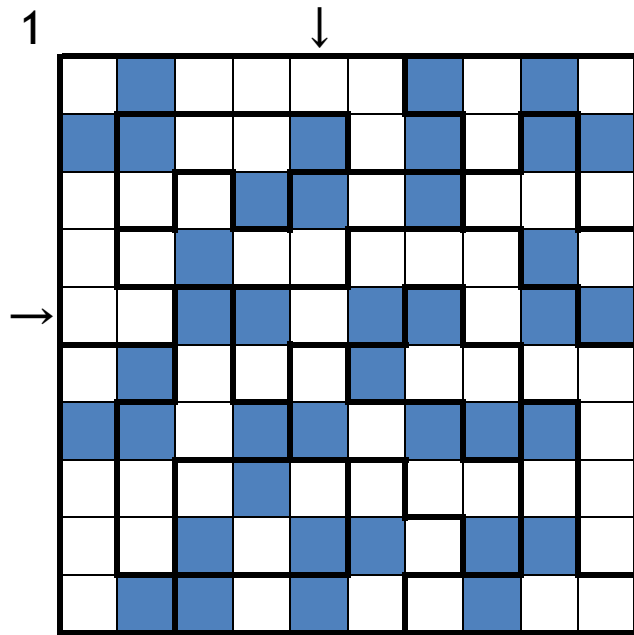
Trio cut

35 + 65 pts

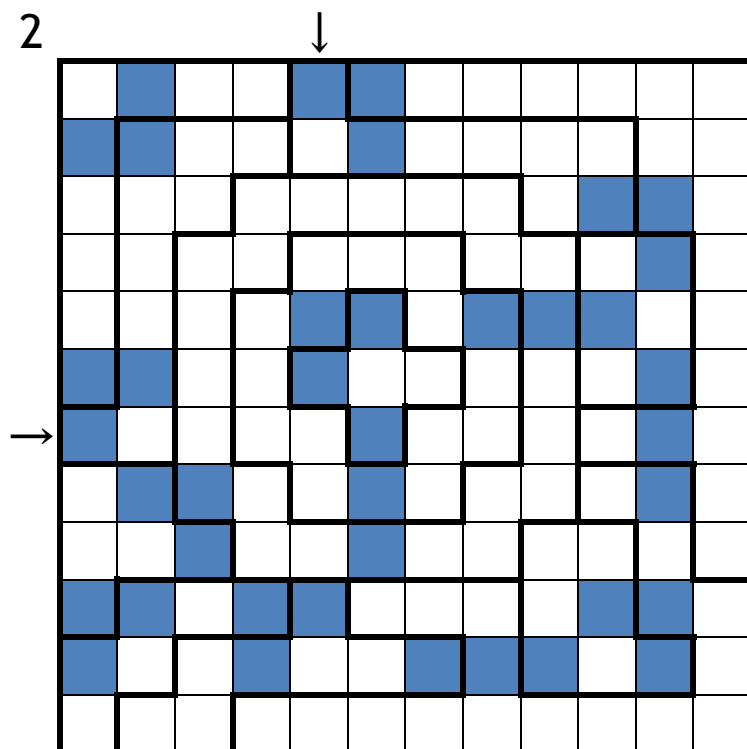
Paint some cells black to make some triominos so that each triomino will be cut twice by thick lines. Each region bordered by thick lines should have three painted cells.

Answer Key

Enter the numbers of continuous cells with polyominos along the marked line.
Enter "0" for row/column with no polyominos..

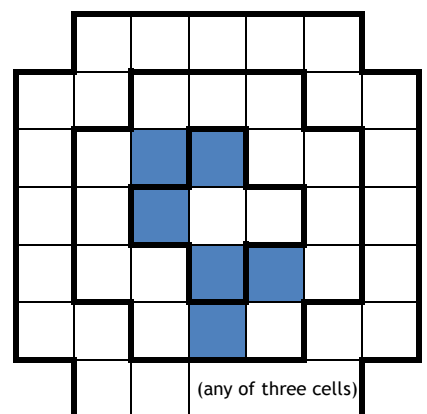
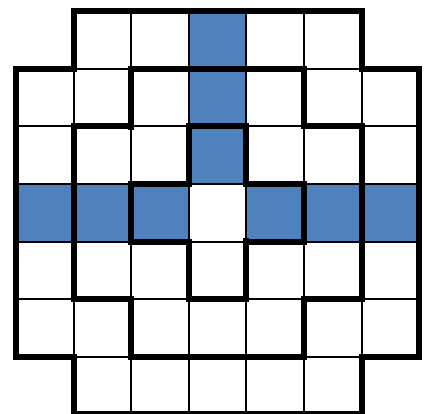


Key: 222, 212



Key: 111, 121

The center 3 regions themselves have a few possibilities to put triominos. The two other orientations are shown below.

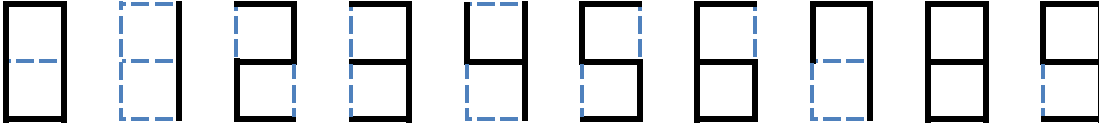


No numbers field

40 + 65 pts

Blacken some cells so that all unblackened cells will be connected virtually or horizontally.
 Blackened cells can't touch each other vertically or horizontally.

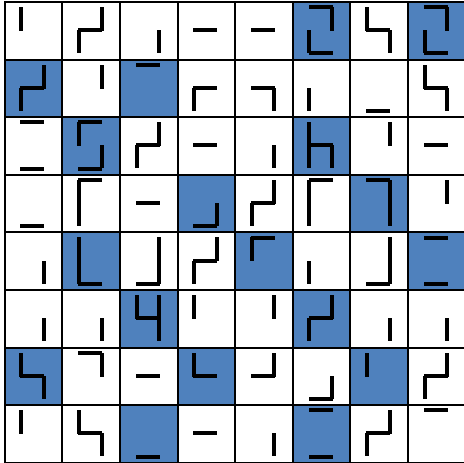
In each row or column, figures of the unblackened cells can't form a number (listed below) when combined all together.



Answer Key

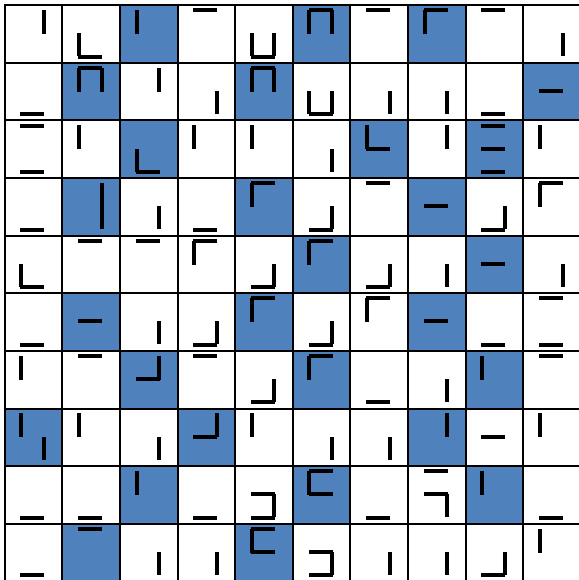
Enter the numbers of blackened cells of each row from top to bottom.

1



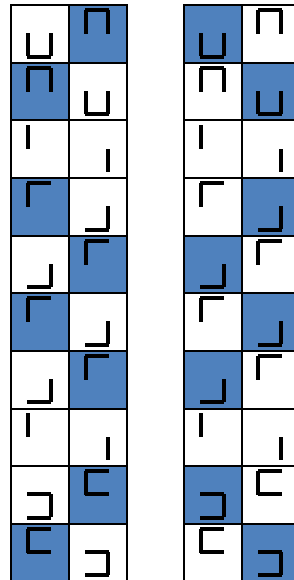
Key: 22223232

2



Key: 3333233332

The very center two columns has just 2 possibilities. That's the first step.



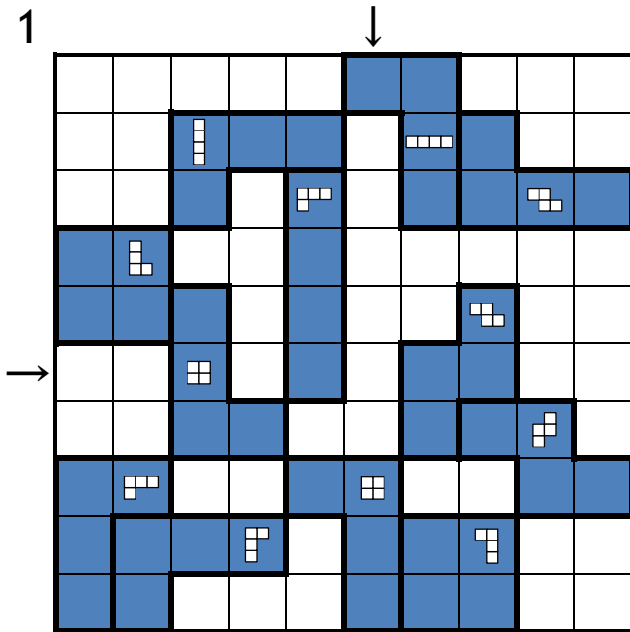
It's yours

40 + 65 pts

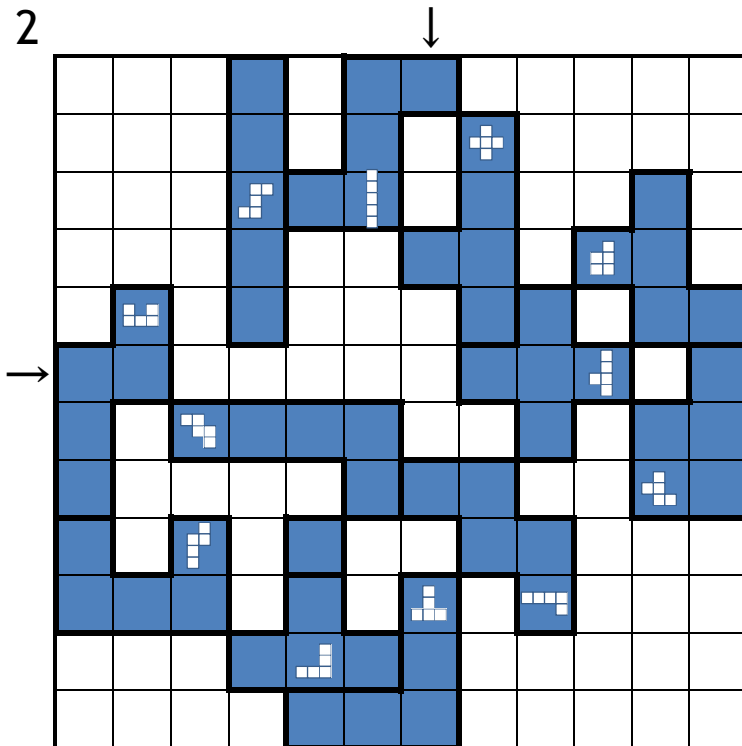
Put some pairs of polyominoes in the grid so that each polyomino has one clue inside it. The paired polyominoes will touch each other, and a pair of polyominoes cannot touch another pair of polyominoes. A clue in a polyomino show the shape of the other polyomino of the pair with no rotation or reflection.

Answer Key

Enter the numbers of continuous cells with polyominoes along the marked line.
Enter "0" for row/column with no polyominoes.



Key: 112, 13



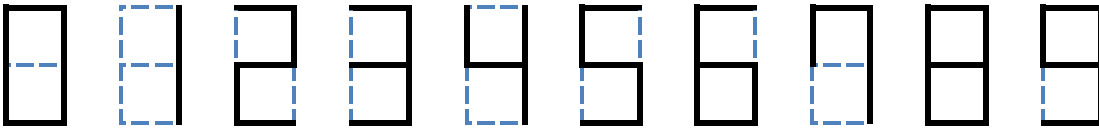
Key: 231, 1113

There are so many possible pairs that easily overlooked in this problem.

No numbers loop

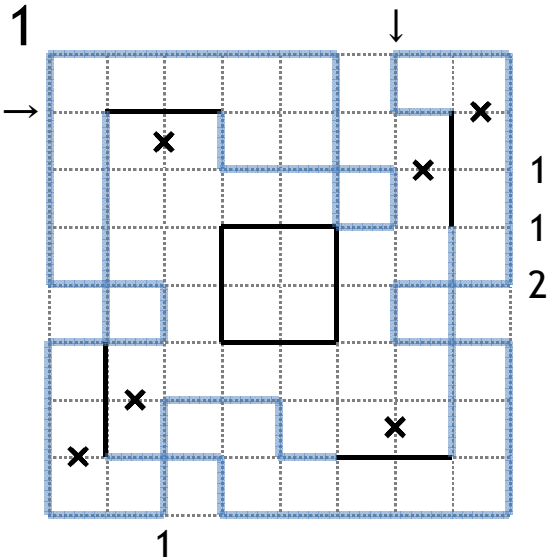
50 + 95 pts

Draw a closed loop in the grid. The loop can cross itself but otherwise never visits any point twice. In any of two adjacent squares, the line segment can't form a number in any orientation. (listed below). Numbers outside the grid shows how many crossings exist along the direction. Some parts of the loop are already drawn for you, and the loop can't go through a segments with "X".

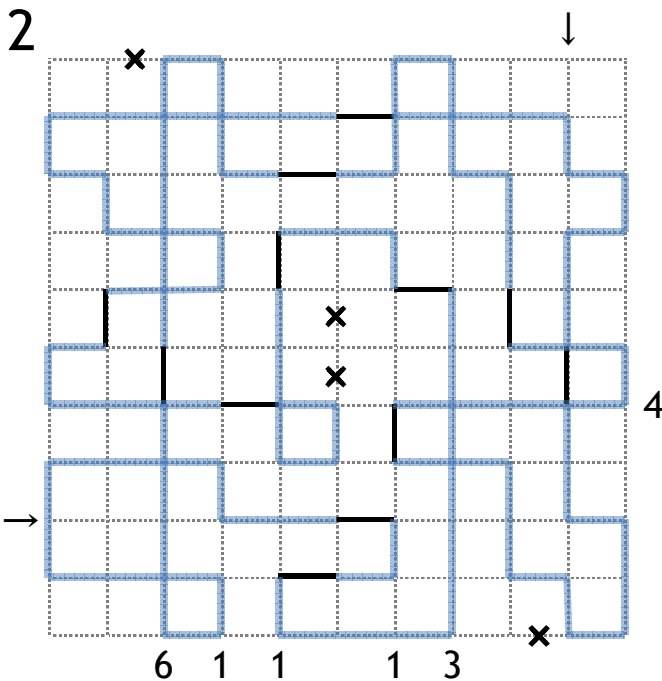


Answer Key

Enter the lengths of line segments along the marked row or column. Enter "0" for row/column with no line segments.

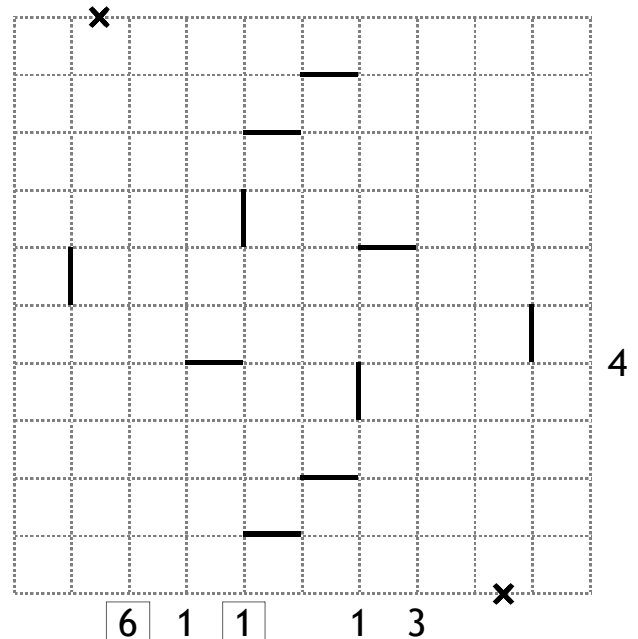


Key: 21, 111



Key: 31, 151

The "6" is the first step.
The next breakpoint is the second "1".
You have to solve very carefully to the final segment.
The first version of this problem is shown below.



Black & White Matchmaker

40 x5 + 25 pts

Match 5 of 6 grids with different puzzletypes and solve them. One grid will not be used.

Masyu

Draw a single loop that passes every cell with a circle.

In cells with black circles, the loop must make a 90-degree turn and goes straight in the other direction.

In cells with white circles, the loop must go straight and makes a 90-degree turn in at least one direction.

Black & white

Fill the grid with black or white circles so that all of the circles with same color will be connected.

Circles with same color can't form a 2x2 square.

Sun & Moon

Draw a single loop that passes every cell.

The loop can't make turns between cells with circles of the same color, and makes just one 90-degree turn between cells with circles of different colors.

Not alone

Fill the grid with black or white circles so that each row or column has the same amount of black circles and white circles.

One circle of a color can't be sandwiched by circles of the other color vertically or horizontally.

An array of two or more circles of a same color may be sandwiched by circles of the other color vertically or horizontally.

Signal loop

Draw a single loop that passes every cell except cells with black circles.

The loop goes straight in cells with white circles.

Answer Key:

Enter the lengths of line segments along the marked row or column. Enter "0" for row/column with no line segments.

(for Masyu, Sun & Moon, and Signaled loop)

Enter the content of the marked row or column; using B for black circles, and W for white circles.

(for Black & white and Not alone)

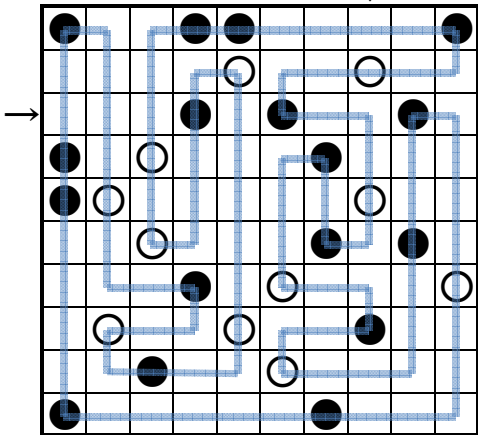
Enter "X" for each marked row or column.

(for the non-used grid)

[Sample order of determination]

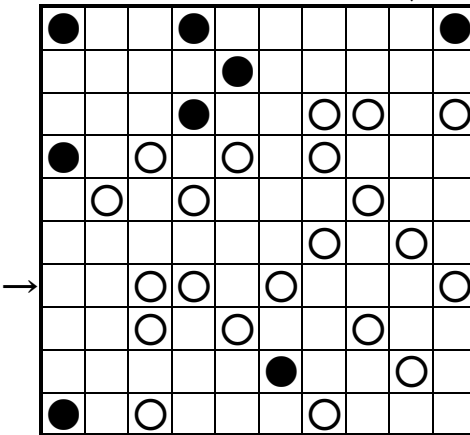
1. "Signal loop" must be matched with D.
2. "Not alone" must be matched with F.
3. B can't be any of the rest puzzletypes.
4. C can't be "Masyu" or "Sun & Moon".

A Sun & Moon



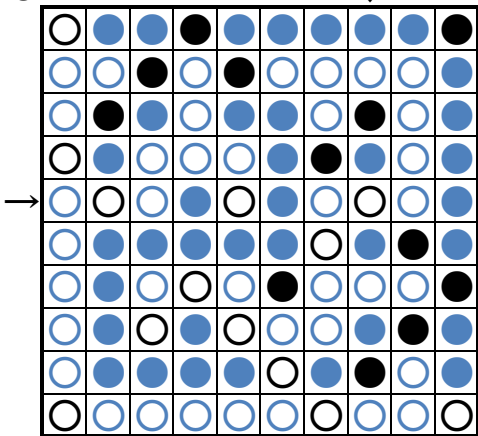
Key: 21, 31

B Not used



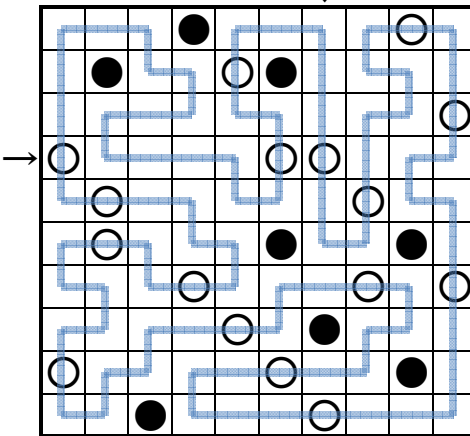
Key: X, X

C Black & White



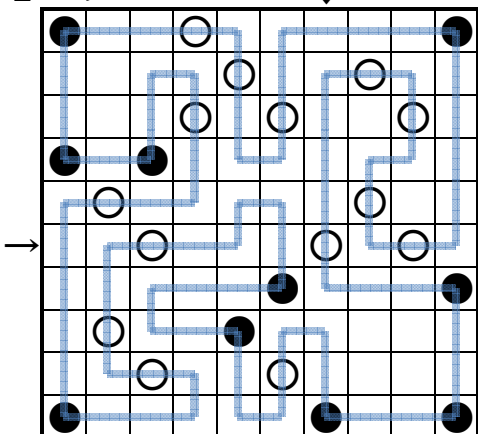
Key: WWWBWBWWWB, BWBBWBWBWW

D Signal loop



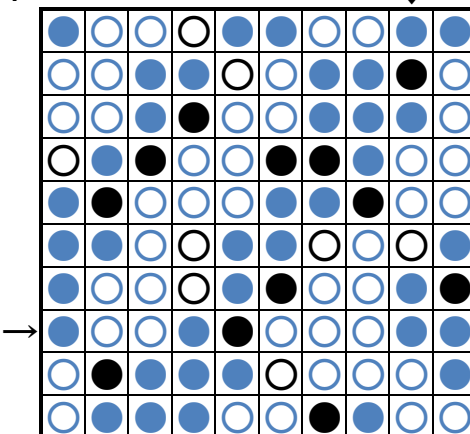
Key: 31, 5

E Masyu



Key: 32, 52

F Not alone



Key: BWBWBWBWWWB, BBBWWWBWBW