

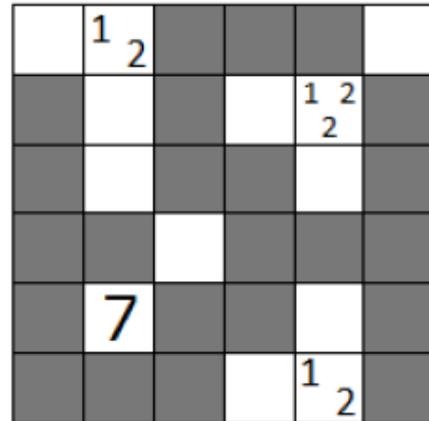
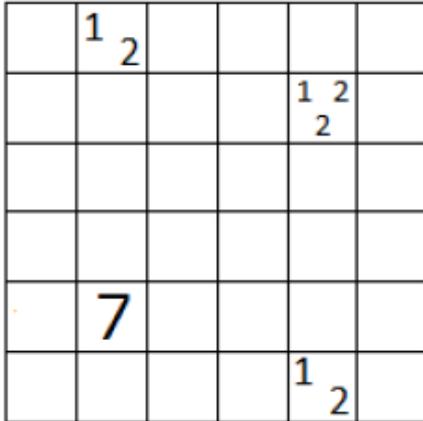
UKPA Open Tournament
3rd - 4th March, 2018
Round 5
Puzzles by Prasanna Seshadri

	Puzzle	Points
1	Tapa	14
2	Tapa Loop	9
3	Rassi Silai	9
4	Anti Symmetry Rassi Silai	19
5	Yajilin	15
6	Double Yajilin	17
7	Cave	22
8	Joker Cave	21
9	Snake	23
10	Toroidal Snake	18
11	Skyscrapers	24
12	Skyscrapers ²	23
13	Akari	25
14	Akari Blocks	17
15	Place by Product	52
16	Place by Product Repeat	42
	Total	350

Time: 70 minutes.

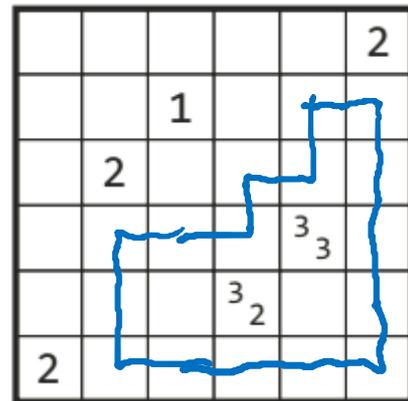
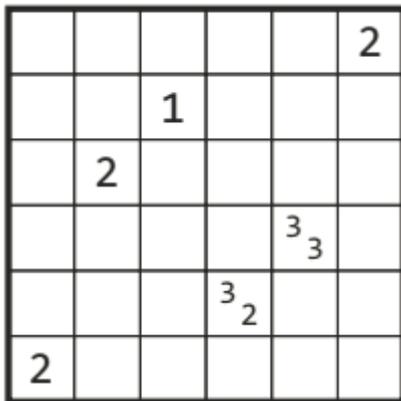
1 Tapa (14)

Shade some cells to create a continuous wall. Numbers in a cell indicate the length of shaded cell blocks in its neighbouring cells. If there is more than one number in a cell there must be at least one unshaded cell between the shaded cell blocks. Shaded cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.



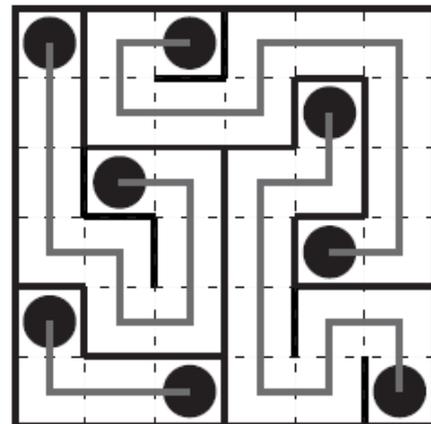
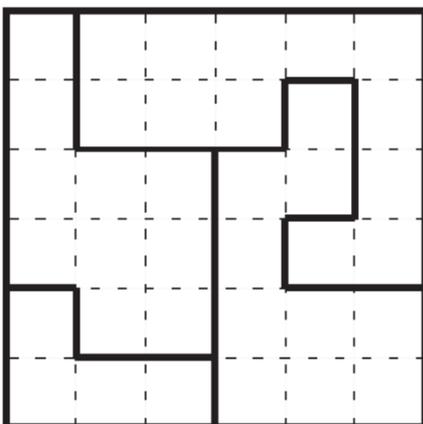
2 Tapa Loop (9)

Draw a closed loop in the grid. Numbers in the grid act like tapa clues identifying the lengths of the loop segments in the cells surrounding the number.



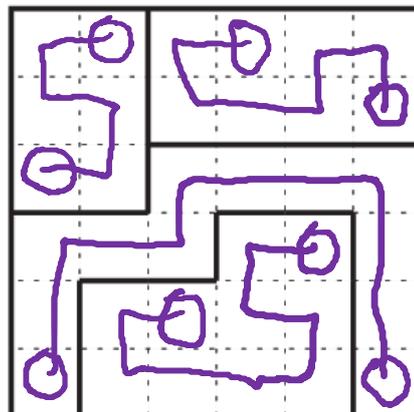
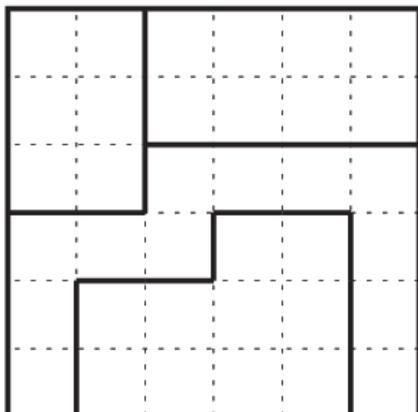
3 Rassi Silai (9)

Draw a rope in each region. Each rope passes through all cells in its region. Ends of ropes do not touch each other, including diagonally or across regions.



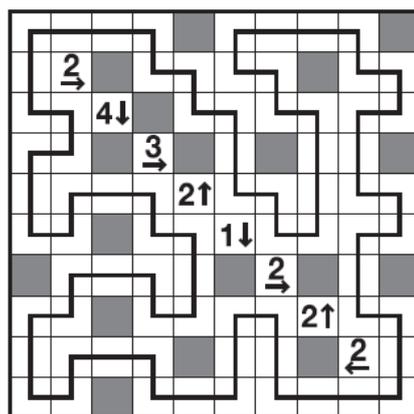
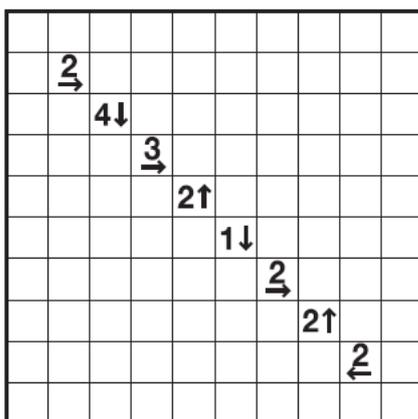
4 Anti Symmetry Rassi Silai (19)

Draw a rope in each region. Each rope passes through all cells in its region. Ends of ropes do not touch each other, including diagonally or across regions. In addition, no ends of ropes may be in 180 degree rotationally symmetric positions.



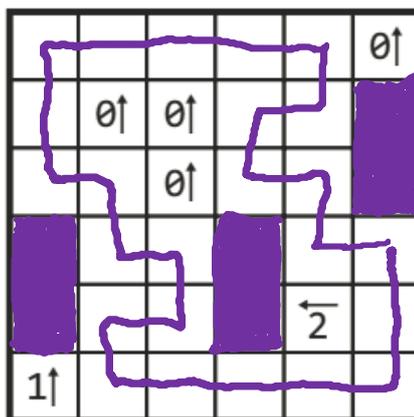
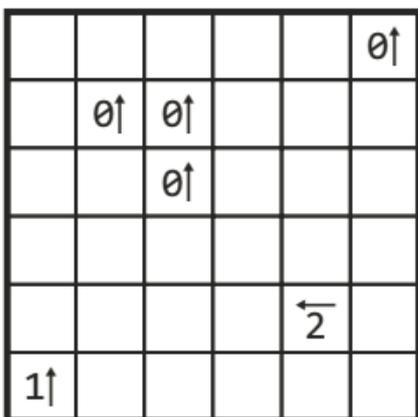
5 Yajilin (15)

Draw a single loop using only horizontal and vertical lines such that the loop does not visit any cell more than once. Any cells which the loop does not visit must be shaded. Shaded cells cannot touch orthogonally. Numbers with arrows indicate the exact number of shaded cells in a given direction in a specific row or column, but not all shaded cells are necessarily identified with arrows.



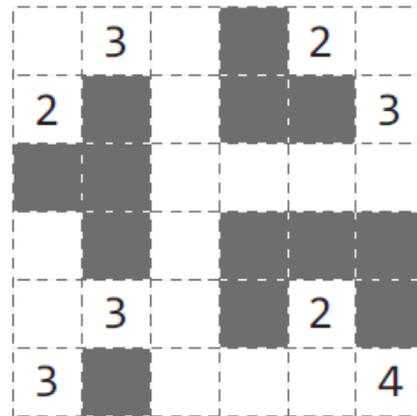
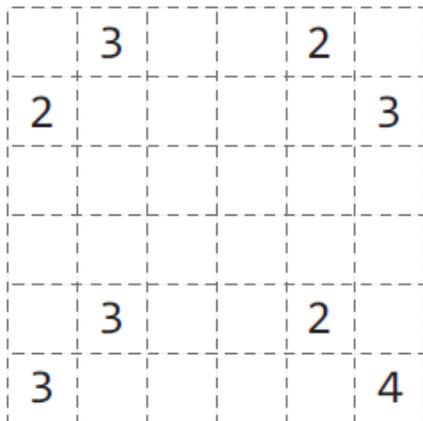
6 Double Yajilin (17)

Draw a single loop using only horizontal and vertical lines such that the loop does not visit any cell more than once. Any cells which the loop does not visit must be shaded. Shaded cells form dominoes (2x1) and cannot touch other dominoes orthogonally. Numbers with arrows indicate the exact number of dominoes in a given direction in a specific row or column not the number of shaded cells. Not all shaded cells are necessarily identified with arrows.



7 Cave (22)

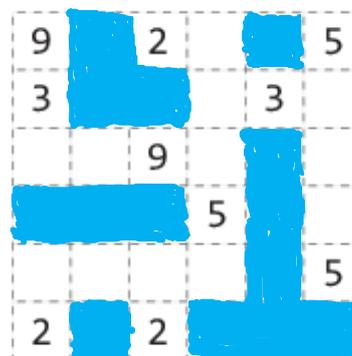
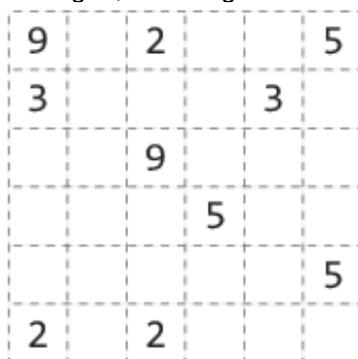
Shade some cells to leave behind a single connected group — the cave. All shaded cells must be connected horizontally or vertically through other shaded cells to an edge of the grid. All numbered cells must be a part of the cave, with each number indicating the total number of cells connected vertically and horizontally to the numbered cell, including the cell itself.



8 Joker Cave (21)

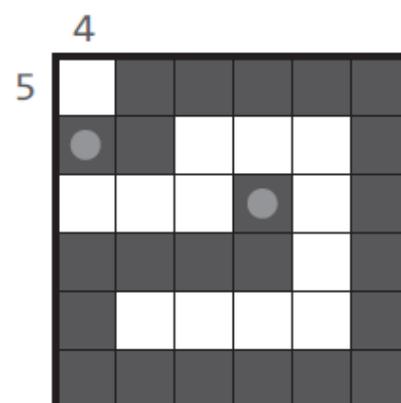
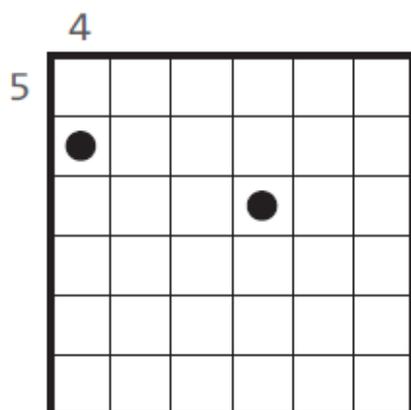
Shade some cells to leave behind a single connected group — the cave. All shaded cells must be connected horizontally or vertically through other shaded cells to an edge of the grid. All numbered cells must be a part of the cave, with each number indicating the total number of cells connected vertically and horizontally to the numbered cell, including the cell itself.

In addition, one number is a joker and all instances of the **joker can be replaced** by any value. The Joker can assume different values across the grid, including its own value.



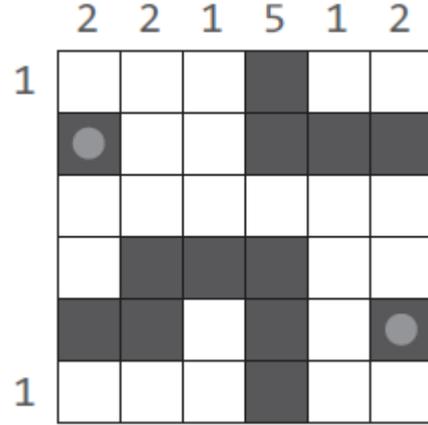
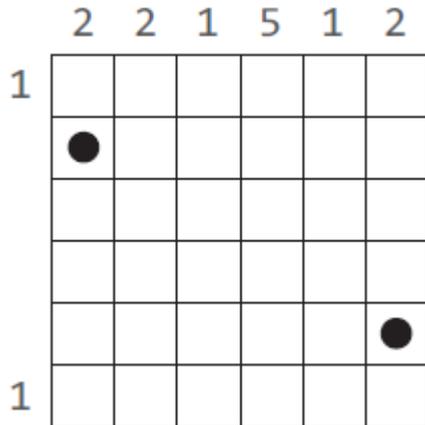
9 Snake (23)

Place a one cell wide snake of unknown length in the grid so that it doesn't touch itself, not even diagonally. The head and tail of the snake are given. Numbers outside the grid indicate how many cells in that row or column are occupied by the snake.



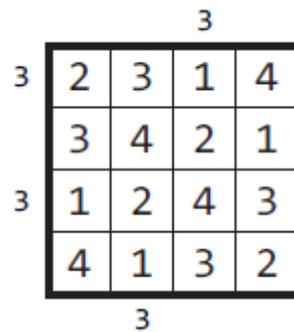
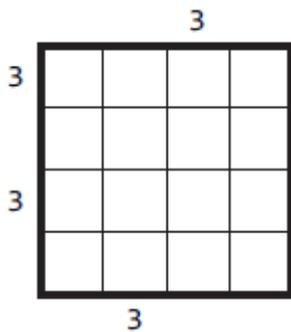
10 Toroidal Snake (18)

Place a one cell wide snake of unknown length in the grid so that it doesn't touch itself, not even diagonally. The head and tail of the snake are given. Numbers outside the grid indicate how many cells in that row or column are occupied by the snake. Additionally, the snake can wrap around all four edges of the grid, but still cannot touch itself, even diagonally across edges.



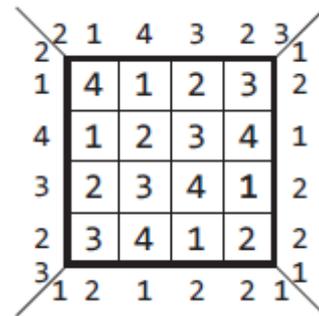
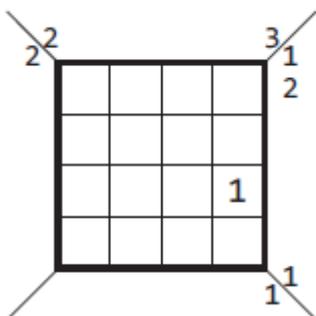
11 Skyscrapers (24)

Place a digit from 1 to N, in an NxN grid, into each of the empty cells so that each digit appears exactly once in each row and column. Each digit inside the grid represents the height of the skyscraper in that cell. Each number outside the grid represents the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones.



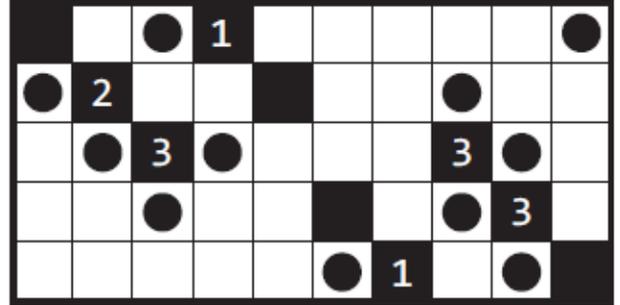
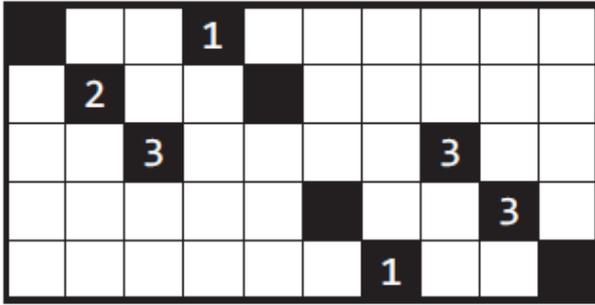
12 Skyscrapers² (23)

Place a digit from 1 to N, in an NxN grid, into each of the empty cells so that each digit appears exactly once in each row and column. Each digit inside the grid represents the height of the skyscraper in that cell. Each number outside the grid represents the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones. Numbers beside diagonal lines indicate the number of skyscrapers seen considering skyscraper clues in a line in the corresponding direction. It may be part of solving to use the missing skyscraper clues.



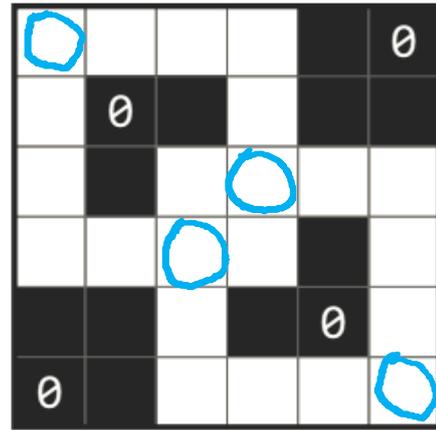
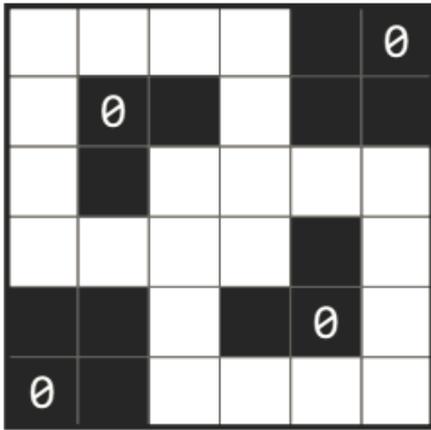
13 Akari (25)

Place light bulbs in some white cells in the grid so that every white cell is illuminated. A cell is illuminated by a light bulb if they are in the same row or column, and if there are no black cells between them. No light bulb may illuminate another light bulb. A number in a black cell indicates the number of light bulbs sharing an edge with that cell.



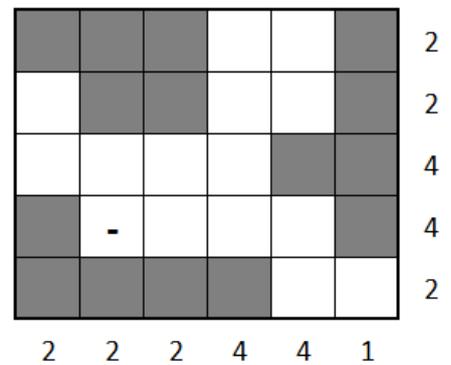
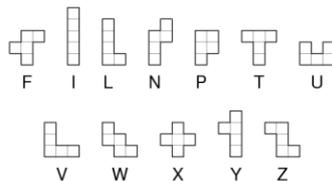
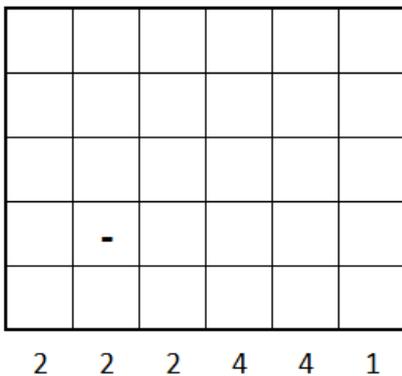
14 Akari Blocks (17)

Place light bulbs in some white cells in the grid so that every white cell is illuminated. A cell is illuminated by a light bulb if they are in the same row or column, and if there are no black cells between them. No light bulb may illuminate another light bulb. A number in a black cell **block** indicates the number of light bulbs sharing an edge with that cell block.



15 Place by Product (52)

Place some pentominoes in the grid so that they don't touch each other not even diagonally. Numbers outside the grid give the product of the non-pentomino spaces in that row or column. Pentominoes cannot repeat. Example uses L, P and Y pentominoes.



16 Place by Product Repeat (42)

Place some pentominoes in the grid so that they don't touch each other not even diagonally. Numbers outside the grid give the product of the non-pentomino spaces in that row or column. Pentominoes **can** repeat. The example uses P and Z pentominoes.

