

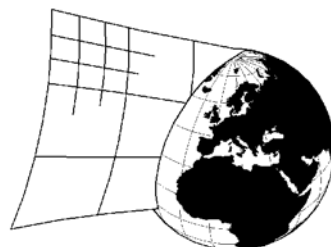
Czech Republic Puzzle Teams Championships

Booklet



Partners:

TESAR consult
<http://tesar.cz>

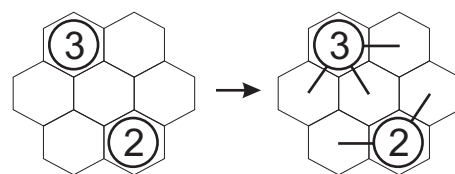


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Spedrapid 

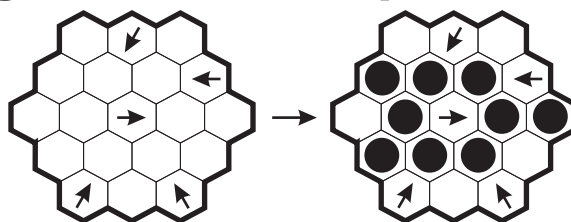
Iso tykadla (Four Winds)

One or more horizontal or vertical lines are drawn from each circled hexagon with number inside (called head). Lines cannot cross other heads. Each head number indicates how many hexagones are connected by its lines; the numbered hexagones themselves are not counted. No lines overlap or intersect each other, and each empty square is covered by exactly one line. Each head with its lines can contain only different digits. All the heads are marked.



Šipky na skupinky (Pointing at the Crowd)

Mark some cells in the hexagonal grid so that each arrow is pointing to the direction with the most marked cells. That direction, as seen from the cell of the arrow, must have strictly more cells marked than any of the other directions parallel to one of the sides of the hexagon.



Domina (Dominoes)

Divide the grid into regions along the gridline so that each domino appears exactly once.

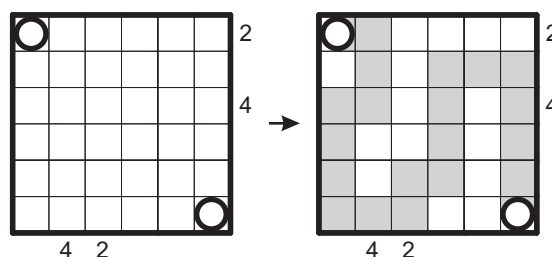
0	0	3	0
3	1	3	1
0	2	3	2
2	2	0	1
1	3	2	1



0	0	3	0
3	1	3	1
0	2	3	2
2	2	0	1
1	3	2	1

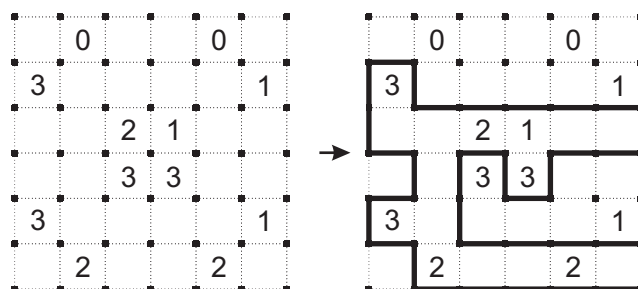
Had (Snake)

Draw a one cell wide snake into the grid. The snake doesn't touch itself, not even diagonally. Numbers outside the grid indicate how many cells are covered in that row or column. The snake's head and tail are given in the grid.



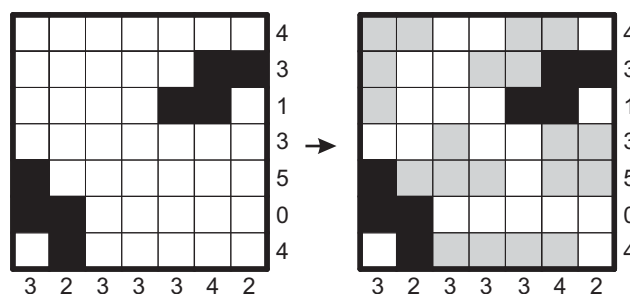
Ploty (Slitherlink)

Draw a single closed loop by connecting dots horizontally and vertically. The loop doesn't touch or cross itself anywhere. Numbers in the grid indicate how many of the four segments around it are used by the loop.



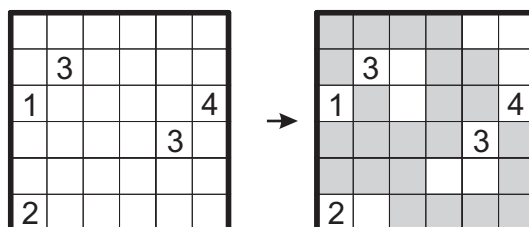
Pentomino

Place all 12 pentominoes once in the grid so that they don't touch each other, not even diagonally. Numbers outside the grid indicate how many cells are occupied by the pentominoes. Pentominoes can't be placed on black squares.



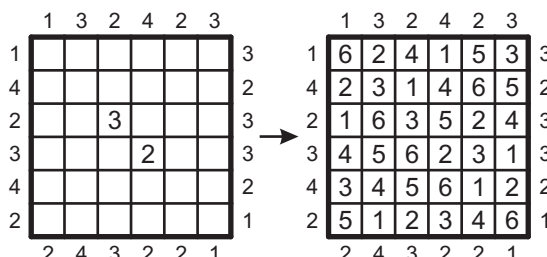
Line Nurikabe

Shade some cells to form a single contiguous wall. The wall can never form a line of 5 or more consecutive cells in any row or column. Each orthogonally connected region of unfilled cells must contain exactly one number. This number indicates the number of cells in this region. Unfilled regions are allowed to touch each other diagonally.



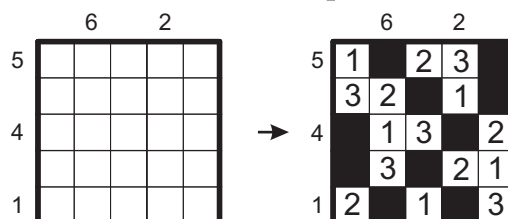
Mrakodrapy (Skyscrapers)

Put a skyscraper of height 1 to 6 in each cell of the grid, so that each number occurs exactly once in each row and column. Clues outside the grid give the number of skyscrapers, which can be seen from that direction. Smaller skyscrapers are covered by higher ones.



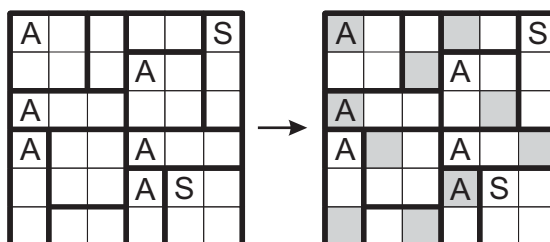
Mezi stěny (Doppelblock, Between Walls)

Place 2 black squares and the digits 1-5 once in each row and column. Numbers on the outside indicate the sum of the digits between the 2 black squares.



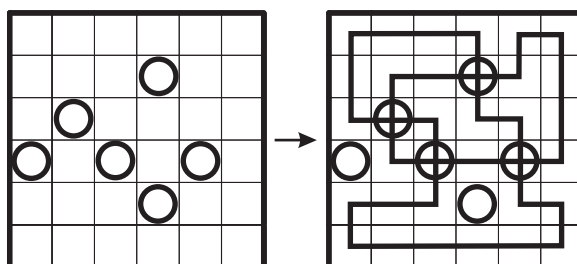
Symetrické Heyawake (Symmetry Heyawake)

Paint some cells black. Black cells are not allowed to touch each other on the sides. The remaining white area has to be connected. The white area can't span over two consecutive boundaries in a single row or column. Letters in a region indicate if the distribution of black cells in this area is rotationally symmetrical or not. An S indicates that the distribution is Symmetrical; an A indicates that the distribution is Asymmetrical.



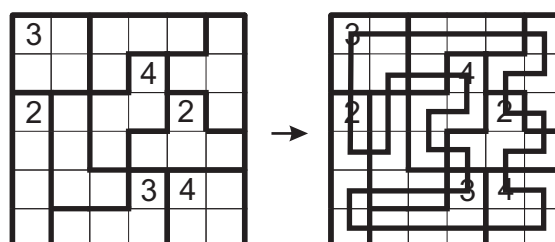
Dvakrát nebo nic (Double or Nothing)

Draw two closed loops in the grid so that each white cell is visited by exactly one of the loops. Loops aren't allowed to cross or touch itself or each other in a white cell. Cell with circles are either visited by both or neither of the loops. When passing through a cell with a white circle the loops always go straight.



Maxi smyčka (Maxi Loop)

Draw a single closed loop in the grid by connecting the centers of cells horizontally or vertically. The loop goes through all cells exactly once. The grid is divided into numerous regions. Numbers in these regions indicate the highest amount of cells the loop goes through consecutively in that region.



Japonská smyčka

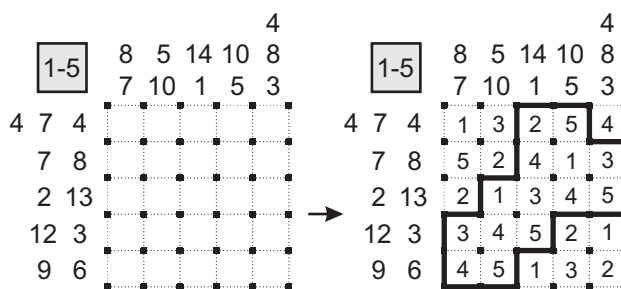
(Japanese loop)

Draw a single closed loop along the gridlines. The loop does not touch or cross itself. Write a digit from 1-9 (1-5 in the example) in each cell of the diagramm.

The loop passing through rows and columns separates the digits into several blocks. A block may be just one single digit.

The numbers beside and above the grid indicate, in the correct order, the sums of digits of each block, in the respective row or column.

No digit may appear more than once in each row or column.



Sousledná japonská smyčka (Consecutive japanese loop)

Draw a single closed loop along the gridlines. The loop does not touch or cross itself. Write a digit from 1-9 (1-5 in the example) in each cell of the diagramm.

The loop passing through rows and columns separates the digits into several blocks. A block may be just one single digit.

The numbers beside and above the grid indicate, in the correct order, the sums of digits of each block, in the respective row or column.

No digit may appear more than once in each row or column.

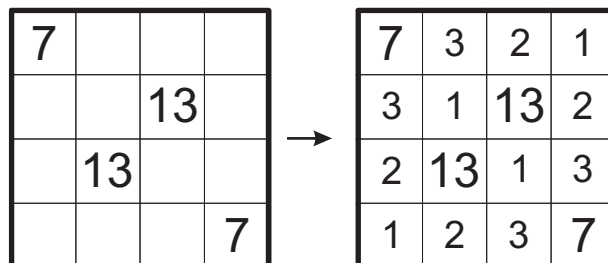
The loop can pass between 2 cells only if these cells contain consecutive digits. Conversely, if 2 adjacent cells contain consecutive digits, the loop must pass between them. Some block sums have been replace by “?” outside the diagramm.

Madárská tapa

(Hungarian Tapa)

Fill the grid with numbers 1-4 so that each number occurs exactly once in each row and column. Cells with numbers are all orthogonally connected and don't form a 2x2-square. There are no numbers in cells with clues.

Each clue gives the sum of a connected group of numbers around the clue cell. If there is more than one clue, there must be at least one blank cell between connected groups. The positions of the clues inside the clue cells have no relevance.

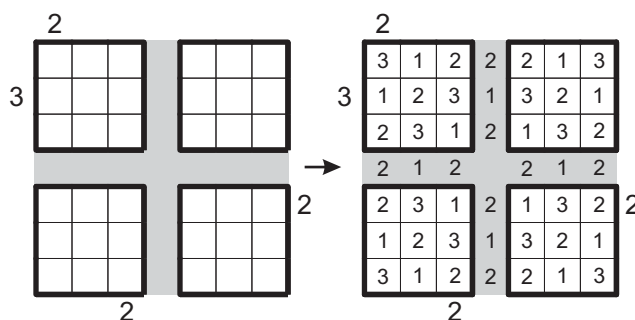


Propojené mrakodrapy

(Linked Skyscrapers)

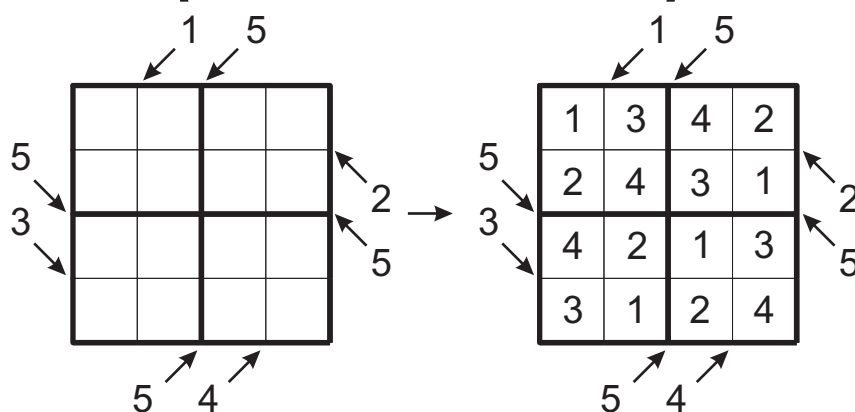
Put a skyscraper of height 1 to 5 in each cell of the grid, so that in each of the four parts, each number occurs exactly once in each row and column. Clues outside the grid give the number of skyscrapers which can be seen from that direction. Smaller skyscrapers are covered by higher ones.

In the grey cells between the four parts, the clues are valid for both directions. Finding these clues is part of the puzzle.



Nepravidelný zabijáček (Little Chaos Killer)

Put a digit from 1 to 7 in each cell of the grid, so that each digit occurs exactly once in each row, column and boldly outlined region. Clues outside the grid give the sum of the numbers in the corresponding diagonal direction.



Trojkové miny (Three mines)

Fill mines into some cells (max. 1 mine per cell). Each cell which doesn't contain the mine and is surrounded by 3 mines in neighbouring cells (horizontally, vertically and diagonally connected) should contain number 3.

2013

Place the given digits in the grid. The characters can be rotated, but not reflected. They cannot overlap or go beyond the borders of the grid. The characters around the grid indicate the first digit seen from the given direction.

Full Masyu

Draw a single closed loop connecting the centres of cells horizontally and vertically. The loop doesn't touch or cross itself anywhere. The loop runs through all the cells. The loop turns in every black circle and goes straight through both adjacent squares. The loop goes straight through every white circle and turns in at least one of both adjacent squares.

Spojovačka (Connect the numbers)

Draw a single line connecting the numbers 1-12 in the order. The line goes horizontally or vertically between centers of cells and does not touch or cross itself.

Cesta (Loop)

Draw a single closed loop that travels through all the white cells. The loop goes horizontally or vertically between centers of cells and does not touch or cross itself. The loop cannot visit the black cells.

Tunely (Tunnels)

Connect pairs of numbers so that the following holds:

- Each connection (tunnel) between two numbers is 1 cell wide and does not touch itself not even diagonally ("snake")
- Both numbers are located at the ends of the tunnel
- The length of the tunnel is equal to the sum of the two numbers that are connected

Rovnice (Math)

Fill in the numbers 1-9 each exactly once so that all the equations hold. Standard operators precedence is not used here.

Japonské součty (Japanese sums)

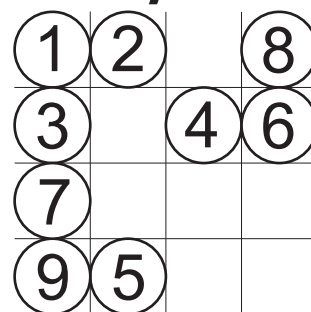
Place the digits 1-9 in some of the squares, so that no digit is repeated in any row or column. Sums on the outside indicate the sums of consecutive digits in that row or column. Each sum is separated by at least one empty square.

Majáky (Lighthouses)

Place some 1 cell ships in the grid. The numbers in the grid represent lighthouses and each number indicates how many ships are visible in the vertical and horizontal directions (ships do not block each other) The ships cannot touch the lighthouses nor each other not even diagonally.

Prodlužování (Increasing distances)

Populate the marked cells with numbers 1-20. The distances between the following numbers must always increase. It means that the distance between numbers $n+1$ and n must be greater than the distance between n and $n-1$. By distance we mean geometrical distance between cell centers.



Radar

There are clouds inside the grid represented by squares or rectangles of the minimum side length 2. The clouds do not touch each other not even diagonally. The numbers outside the grid indicate how many cells are used by clouds in the given row or column.

ABC s odstupy (Easy as ABC with distances)

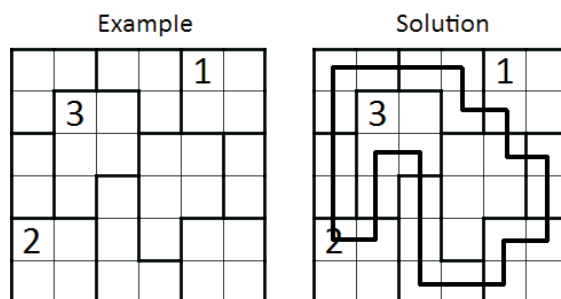
Fill in the grid with letters A-E so that each letter is placed exactly once in each row and column. The hints outside the grid indicate the first letter seen from the given direction and the distance to the next letter behind the first one.

Dvojblok (Double block)

Place digits between 1-4 and two black blocks in each row and column. Numbers outside the grid give the sum of the digits which are placed between the blocks in the given row or column.

Country Road

Draw a closed loop through the grid, connecting the centres of cells horizontally and vertically. The loop runs through all boldly marked areas once. Two neighbouring cells in different areas can't both be unused by the loop. The numbers in the grid indicate how many cells in that the loop runs through.

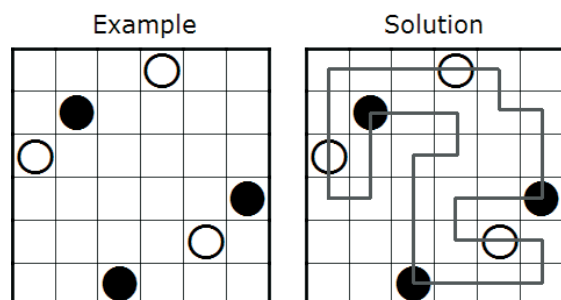


Příklad převzatý ze stránek:

<http://puzzleparasite.blogspot.in/2011/09/rules-country-road.html>

Masyu

Draw a single closed loop connecting the centres of cells horizontally and vertically. The loop doesn't touch or cross itself anywhere. The loop runs through all black and white circles. The loop turns in every black circle and goes straight through both adjacent squares. The loop goes straight through every white circle and turns in at least one of both adjacent squares.

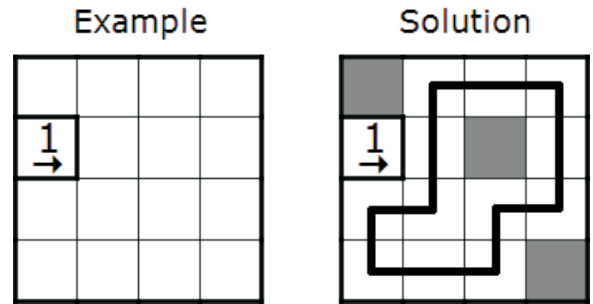


Příklad převzatý ze stránek:

<http://puzzleparasite.blogspot.in/2012/06/rules-masyu.html>

Yajilin

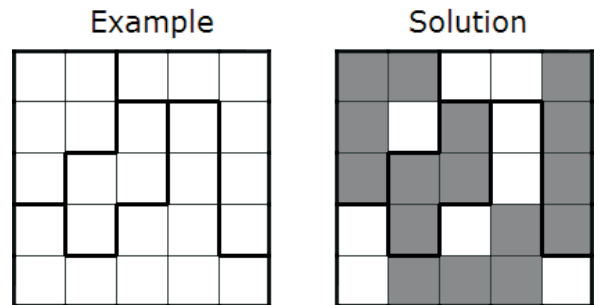
Colour some cells so that you can draw a closed loop through all remaining white cells. The numbers in the grid tell you how many coloured cells can be seen in the direction of the arrow. No coloured cells are allowed to share an edge.



Příklad převzatý ze stránek:
<http://puzzleparasite.blogspot.in/2011/10/rules-yajilin.html>

LITS

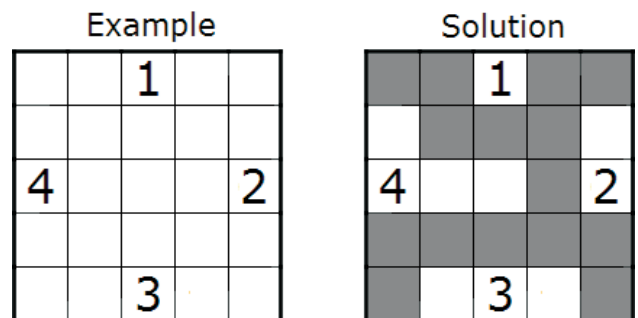
Colour a shape of 4 orthogonally connected squares in each black bordered region so that all coloured squares form a single contiguous area. This area can't contain any 2x2 coloured squares. Two identical shapes in different regions can't touch each other by a side. Rotations and reflections are considered the same shape.



Příklad převzatý ze stránek:
<http://puzzleparasite.blogspot.in/2012/02/rules-lits.html>

Nurikabe

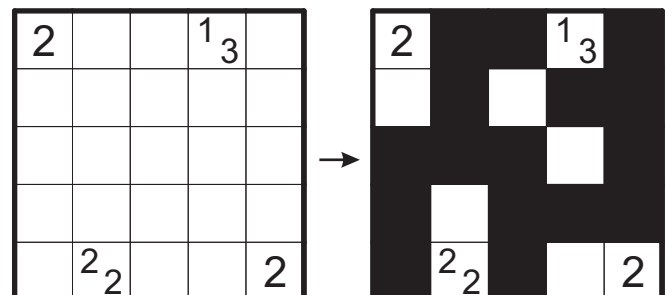
Determine for each cell if it's part of the stream or an island. Each number is part of a single island of horizontally and vertically connected cells, which size is equal to that number. Islands can't touch each other horizontally or vertically. The cells not part of an island form the stream. The stream is a single connected area, which doesn't cover any 2x2 areas anywhere.



Příklad převzatý ze stránek:
<http://puzzleparasite.blogspot.in/2011/11/rules-nurikabe.html>

Tapa

Colour some cells to create a single contiguous shape. The shape can't have any 2 by 2 coloured areas. The clues in the grid tell you how many consecutive cells around it have to be coloured. If there's more than one digit in a cell, the groups of cells have to be separated by at least one empty cell. Cells with clues remain empty.



Čtyři v jednom

(Four in one)

The grid combines 4 different puzzles.

1. Inside the grid there is a closed loop of the width of 1 cell which does not touch itself not even diagonally ("closed snake"). The number of cells occupied by the loop in the given row or column is shown on the top and on the left side of the grid. The loop cannot go through the cells with numbers.

2. There is a set of battleships in the grid of the following sizes: 1x (1x5) cells, 2x (1x4), 3x (1x3), 4x (1x2) and 5x (1x1) cell. The battleships cannot cover the cells with number nor the loop and cannot touch each other not even diagonally. The number of cells occupied by the ships in the given row or column is shown at the bottom and on the right side of the grid. The ships can be both inside and outside the grid, but the remaining area inside the loop must stay ortogonally connected and the same holds for the area outside the loop.

3. The numbers inside the grid which are outside the loop represent the four winds elements. Each number indicates the sum of the straight lines going out from the number in any of the four orthogonal directions (not counting the cell with number). The lines must cover all the cells outside the loop except the ones covered by ships.

4. The interior of the loop is a cave. The numbers inside the loop indicate the number of the cell visible in vertical and horizontal directions from the given point, including the cell with the number. The visibility is blocked either by the loop or by a ship.

Pyramidy

(Pyramides)

Solve 4 pyramid puzzles. In each pyramid fill all the empty cells with numbers between 1-9, so that each number (from second row up) is either sum or difference of the two number which are directly below. In white row the numbers cannot repeat. In gray row at least number must be repeated at least once. The pyramids are interconnected. The small square cells between pyramids give the difference between the two cells adjacent to it by their short side.

2	5	1	3	2	
7	1	4	4	1	5
	5	1	8	2	3
2		9		6	2
	4	7	2	4	3
2	1	5	7	4	1
1	1	6	1	0	

We're looking forward to see you in Brno!

On behalf of organizers

Ing. Karel Tesař