# CZECH PUZZLE CHAMPIONSHIP 2018

PRAGUE, 19. – 20. 5. 2018

## 1st INDIVIDUAL ROUND – CITY

## 45 minutes – 600 points

| | |
|---|---|
| 1-2) Skyscrapers | 33 + 64 points |
| 3-4) Akari | 15 + 39 points |
| 5-6) Double Block | 29 + 57 points |
| 7) Flea Sweeper | 38 points |
| 8-9) Hashiwokakero | 10 + 16 points |
| 10) Yajilin | 89 points |
| 11-12) Neighbours | 20 + 44 points |
| 13-14) Neighbouring Lands | 17 + 42 points |
| 15-16) Subway | 34 + 53 points |


PUZZLE AUTHORS:

Jan Zvěřina (1-4, 7-10, 12)

Matúš Demiger (5-6, 11, 15-16)

Petr Vejchoda (13-14)

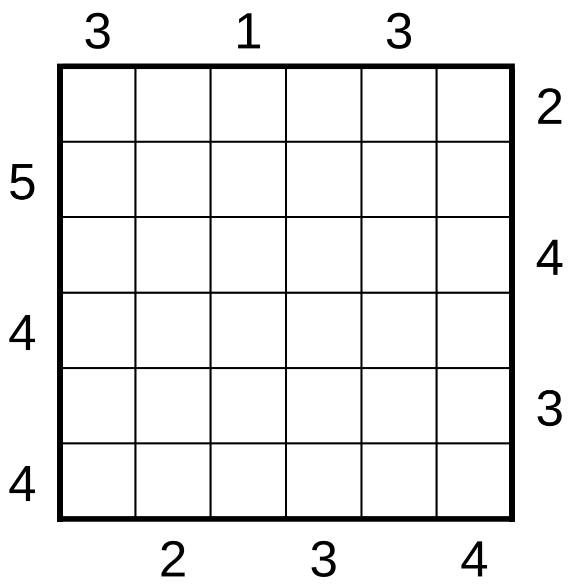
PUZZLE TESTERS:

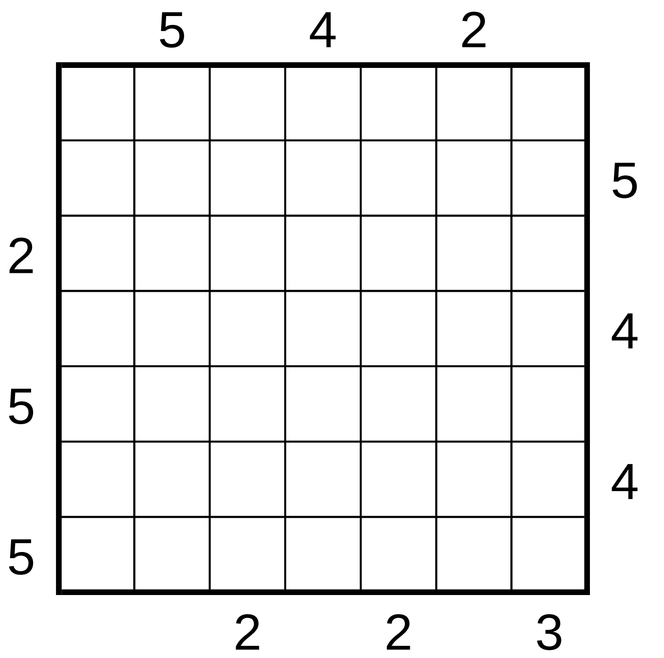
Štefan Gašpár

Matej Uher

**1-2) SKYSCRAPERS (33 + 64 points)**

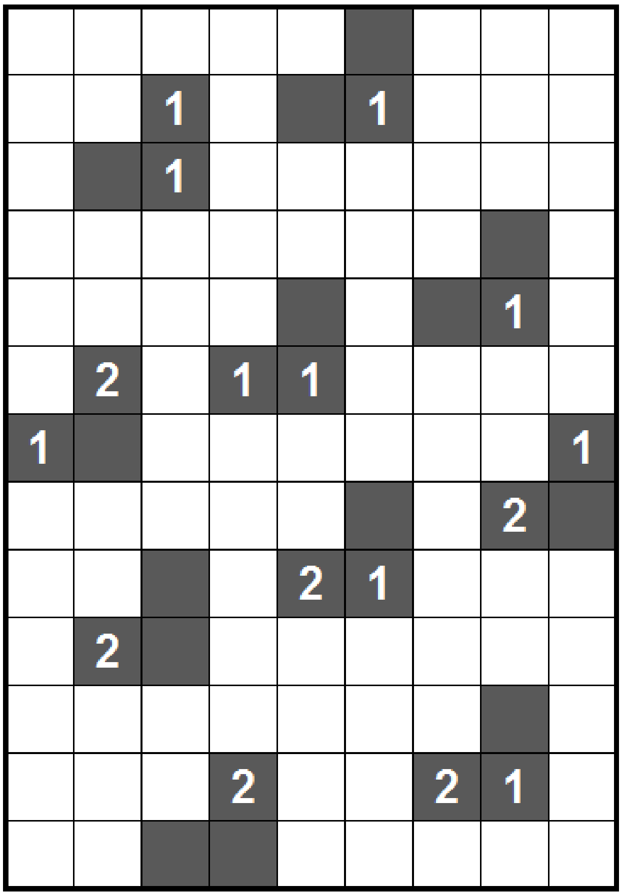
Insert a digit from 1 to N into each cell in the N by N grid so that no digit repeats in any row or column. Also, each number in the grid represents the height of a building and the clues on the outside of the grid indicate how many buildings can be “seen” when looking from that direction. Taller buildings block the view of smaller buildings. For example, if a row contained the numbers 15342, then two buildings are seen from the left – 1 and 5 – and three buildings from the right – 2, 4, and 5 – with the other buildings blocked by taller buildings in front of them.

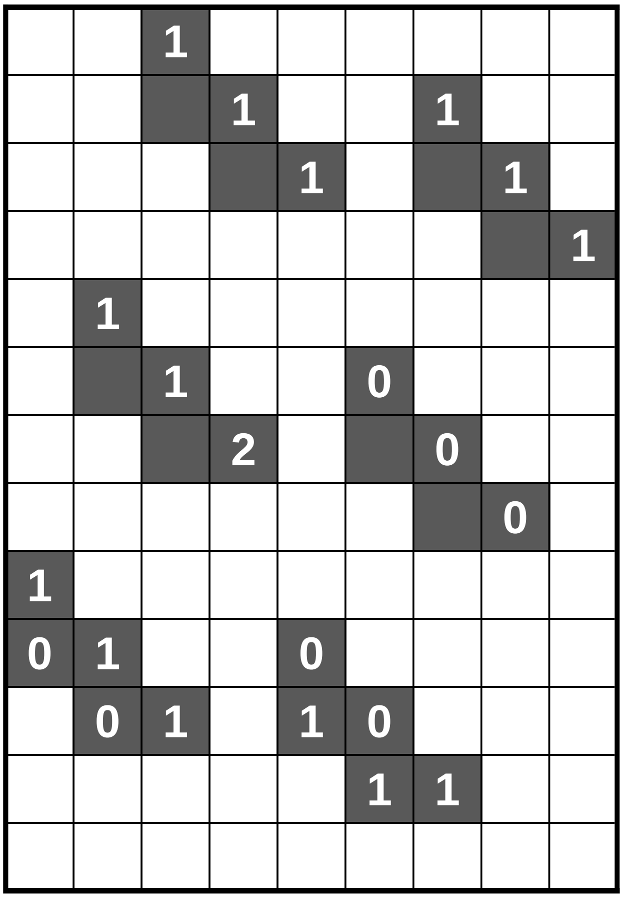



**3-4) AKARI (15 + 39 points)**

Place “lightbulbs” in some grid squares. Each lightbulb illuminates every square in each of the four compass directions (imagine a rook in chess) up until a black cell is hit. Every grid square must be illuminated, but no two lightbulbs may illuminate each other. A black cell with a number indicates how many of the four surrounding cells have a light bulb.





## 5-6) DOUBLE BLOCK (29 + 57 points)

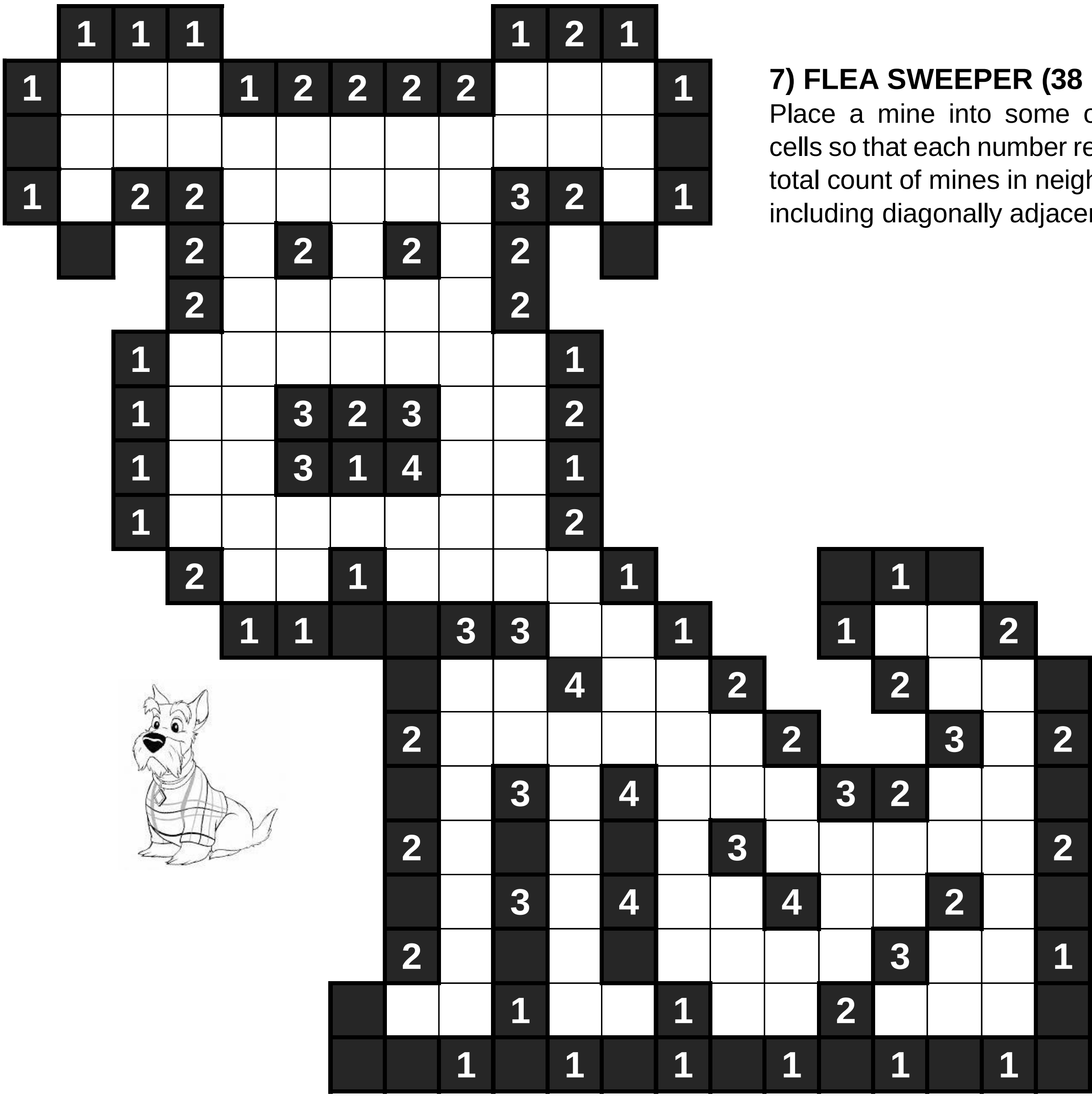
Blacken exactly two cells in each row and each column of the grid. Place digits 1-6 on each row and column. Numbers outside the grid indicate the sum of the digits between the two black cells in the corresponding row or column.

| | 3 | 13 | 9 | 20 | 1 | 18 | 15 | 7 |
|---|---|---|---|---|---|---|---|---|
| 7 | | | | | | | | |
| 7 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 19 | | | | | | | | |
| 18 | | | | | | | | |
| 10 | | | | | | | | |
| 5 | | | | | | | | |

| | 10 | 8 | 9 | 18 | 3 | 7 | 10 | 15 |
|---|---|---|---|---|---|---|---|---|
| 7 | | | | | | | | |
| 4 | | | | | | | | |
| 20 | | | | | 3 | | | |
| 12 | | | | 2 | | | | |
| 9 | | | | | 4 | | | |
| 12 | | | | 1 | | | | |
| 15 | | | | | | | | |
| 13 | | | | | | | | |

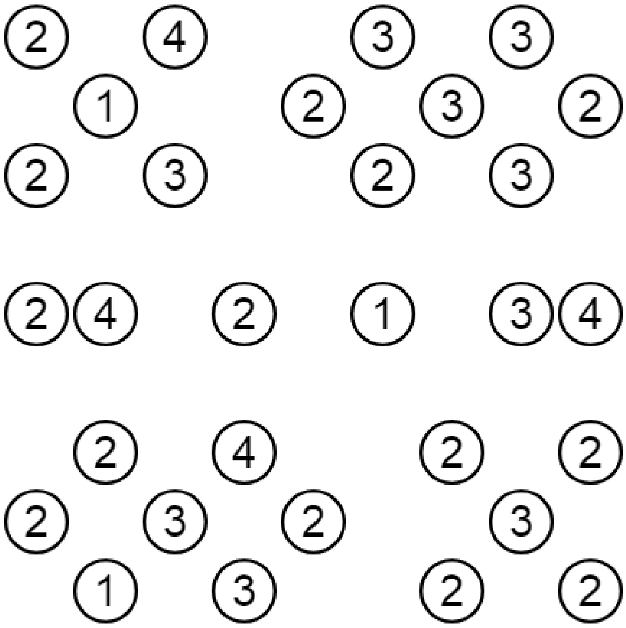
## 7) FLEA SWEEPER (38 points)

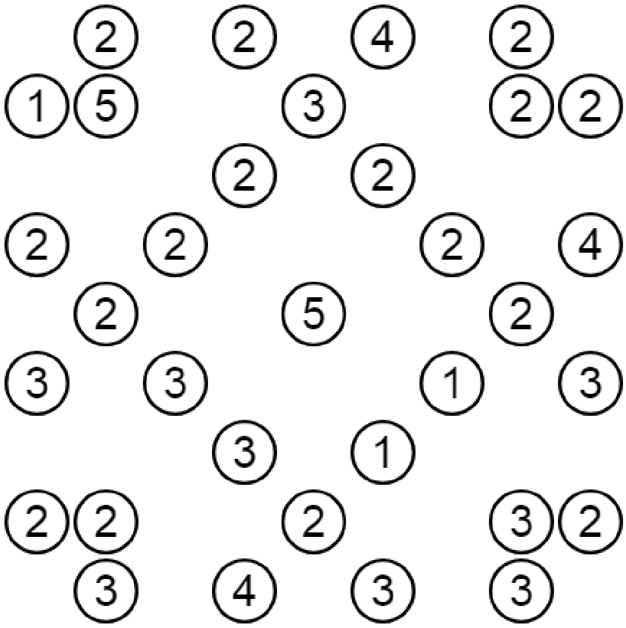
Place a mine into some of the empty cells so that each number represents the total count of mines in neighboring cells, including diagonally adjacent cells.



### 8-9) HASHIWOKAKERO (10 + 16 points)

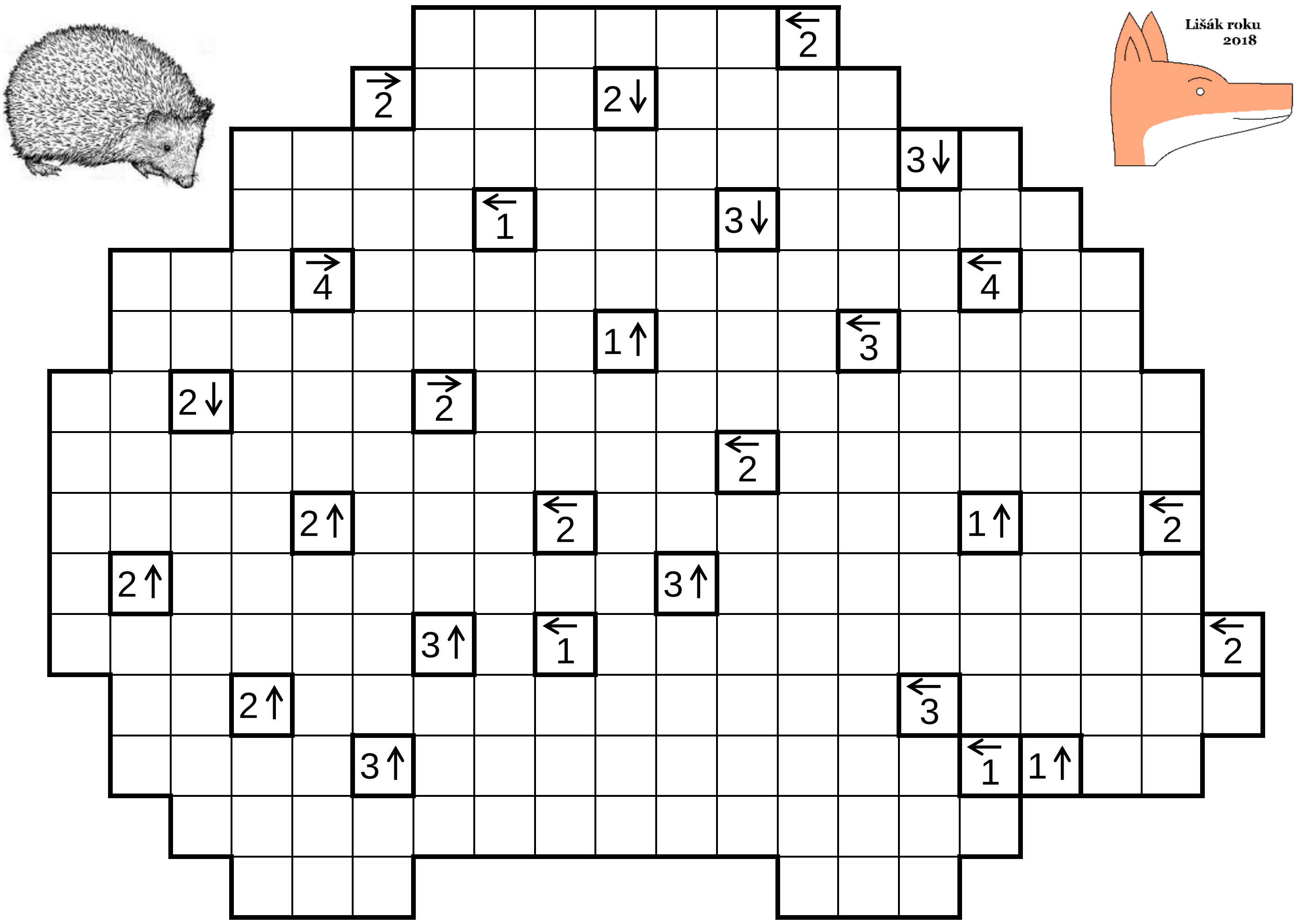
Draw horizontal and vertical lines ("bridges") between the circles ("islands") to form a connected network such that there is a path along bridges between any two islands. There can be either one or two bridges between each vertically/horizontally connected pair of islands, and the numbers in the islands indicate the total number of bridges immediately connected to that island.





### 10) YAJILIN (89 points)

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.



**11-12) NEIGHBOURS (20 + 44 points)**

Place a digit from 1 to 3 into each of the empty cells so that each row and column contained each number twice (left grid) or three times (right grid). If a cell is coloured, then its adjacent cells must contain different digits. If a cell is white, then the number in that cell must repeat at least once in any of adjacent cells.

| | | | | | |
|---|---|---|---|---|---|
| | | | | | 1 |
| | 3 | | | | |
| | | | | | |
| | | | | | |
| | | | | 2 | |
| 2 | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 2 | | | | | | 2 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| 3 | | | | | | 2 | | |

**13-14) NEIGHBOURING LANDS (17 + 42 points)**

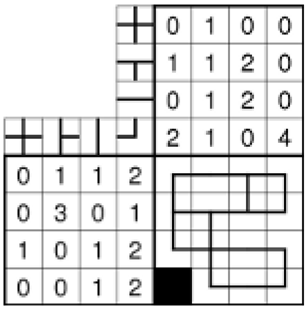
Draw some lands in the grid. Some cells will remain empty and will not be part of any land. Each land has exactly one neighbouring land with which it shares a border (adjacent cell/cells). Each land contains exactly one digit and that digit indicates the size of the neighbouring land (in area). Each cell is part of maximally one land.

| | | | |
|---|---|---|---|
| | | | |
| | | 3 | |
| | 1 | | 4 |
| 4 | | | |

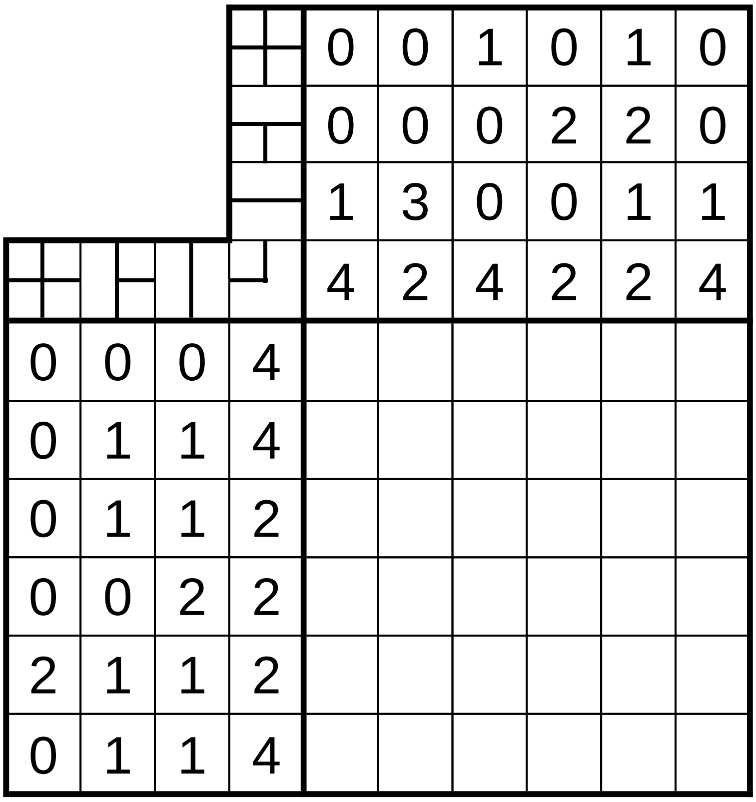
| | | | | | |
|---|---|---|---|---|---|
| | 1 | | | | 2 |
| | | | | 3 | |
| 3 | | | 3 | | |
| | | 2 | | | 1 |
| | 3 | | | | |
| 2 | | | | 4 | |

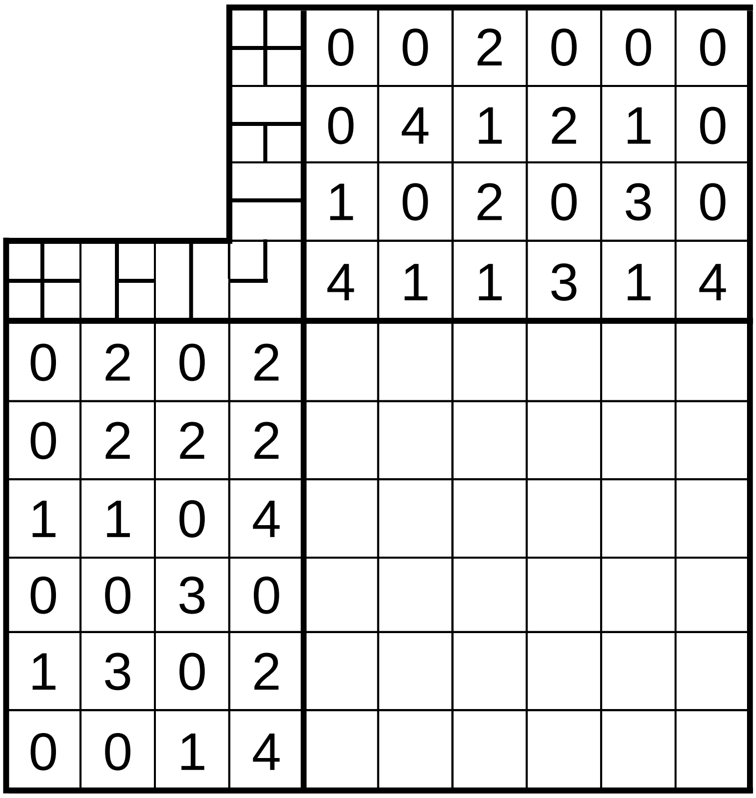
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | 2 | |
| 6 | | | | | | | |
| | 1 | | 3 | | 2 | | 1 |
| | | | | | | | |
| | | | 2 | | | 3 | |
| 3 | | | | | 2 | | |
| | | 3 | | 4 | | | 3 |
| 2 | | | | | | | |

**15-16) SUBWAY (34 + 53 points)**




Draw a map of an underground of a city (with horizontally and vertically lines from center to center of the fields). At the center of a field, the lines may turn or branch. The whole map is connected. There are no dead ends. The underground cannot leave the grid. The numbers at the borders give the corresponding numbers in that row or column. The pieces may be rotated. Fields may stay empty.



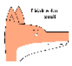



# CZECH PUZZLE CHAMPIONSHIP 2018

PRAGUE, 19. – 20. 5. 2018

## 2nd INDIVDUAL ROUND – SEA

## 70 minutes – 700 points

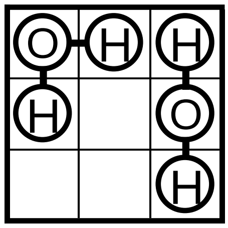
| | |
|---|---|
| 1-2) H2O | 18 + 19 points |
| 3-4) Battleships | 21 + 32 points |
| 5-6) Coral | 15 + 74 points  |
| 7-8) Compass | 29 + 70 points |
| 9-10) Lighthouses | 14 + 33 points |
| 11-12) Aquarium | 26 + 54 points |
| 13-14) Nurikabe | 43 + 45 points |
| 15-16) Anglers | 10 + 67 points |
| 17-18) Land and Sea | 18 + 48 points |
| 19) Sea Creatures | 64 points |

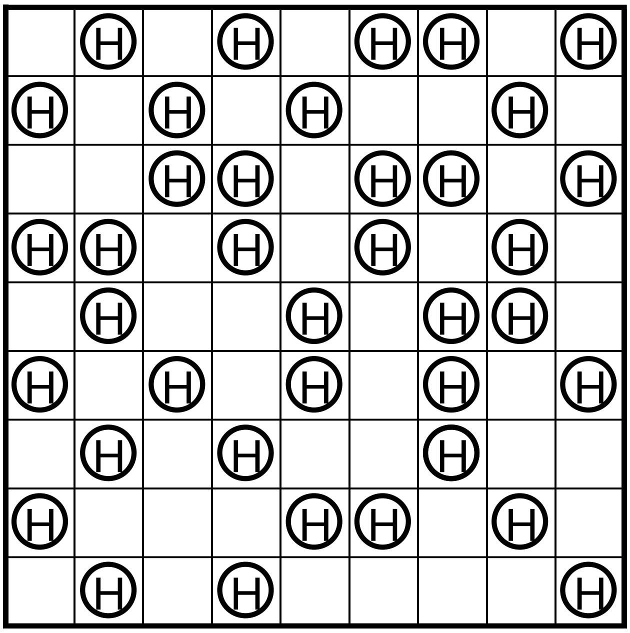
PUZZLE AUTHORS: Jan Zvěřina (11-15, 16-19), Matúš Demiger (1-10, 15)

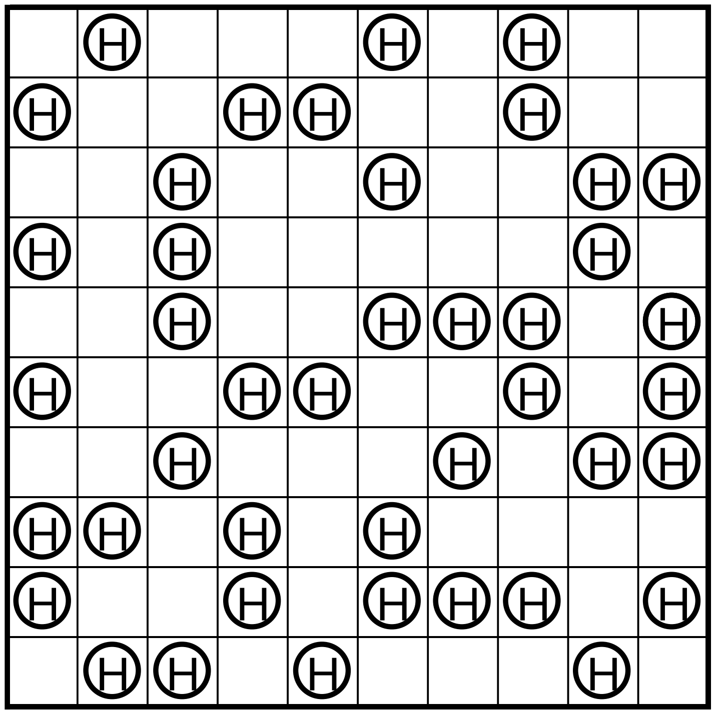
PUZZLE TESTERS: Štefan Gašpár, Matej Uher

**1-2) H2O (18 + 19 points)**

Letters H represent hydrogen atoms. Place letter O into some of the empty cells. Letters O represent oxygen atoms. Letters O can not touch each other, not even diagonally. Then divide all letters into water molecules. Each molecule contains two hydrogen atoms and one oxygen atom. All atoms from the same molecule must be orthogonally interconnected and the oxygen atoms must be located in the middle of the molecules.

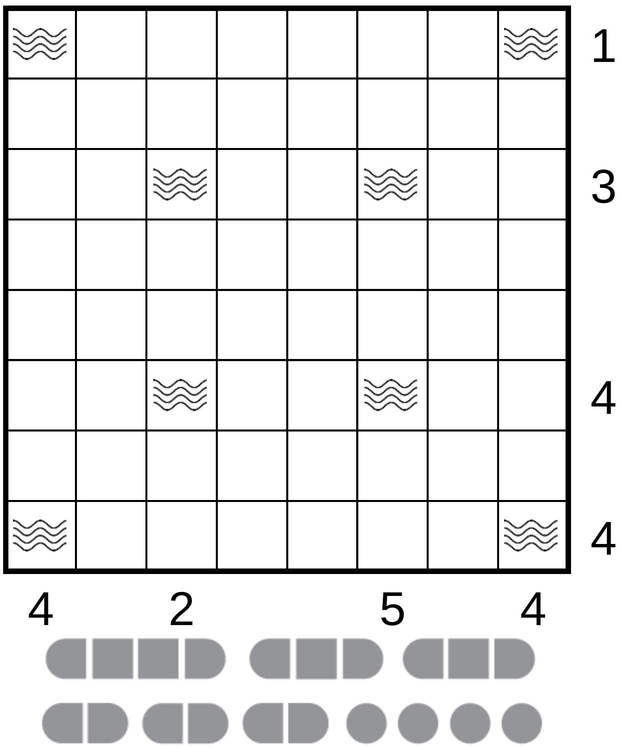


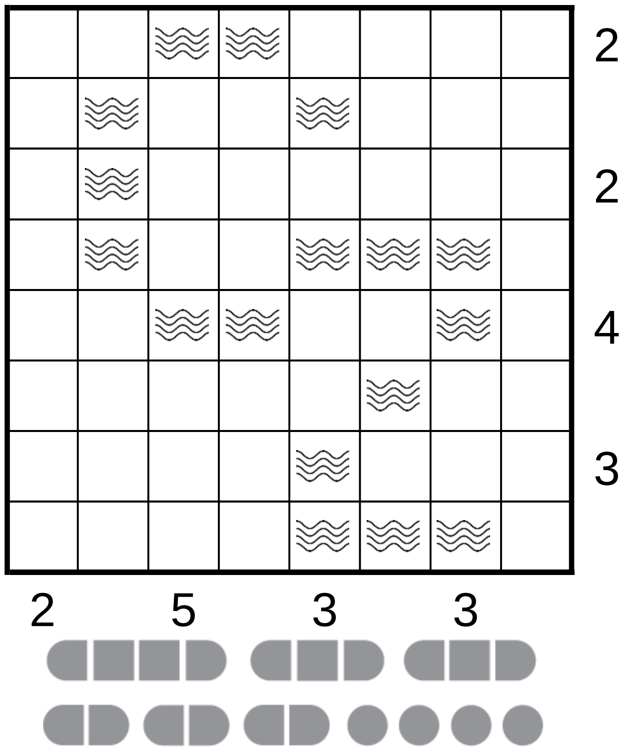





**3-4) BATTLESHIPS (21 + 32 points)**

Locate the indicated fleet in the grid. Each segment of a ship occupies a single cell. Ships can be rotated. Ships do not touch each other, even diagonally. Some ship segments, or sea cells without any ship segments, are given in the grid. The numbers on the right and bottom edges of the grid reveal the number of ship segments in that row or column.



### 5-6) CORAL (15 + 74 points)

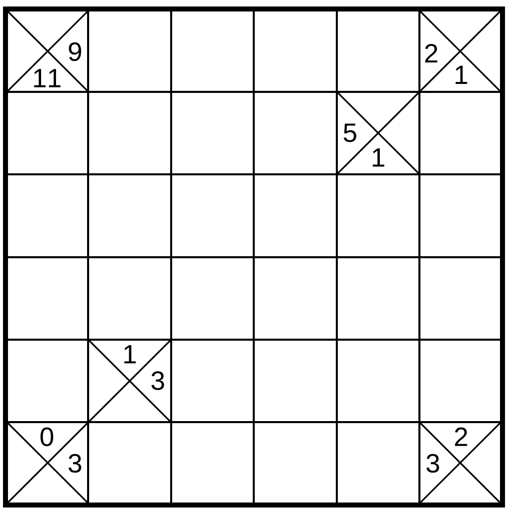
Shade some cells so that all blackened areas are connected, but no group of 2×2 cells is entirely blackened. Also, there are no unshaded areas enclosed by the coral (meaning each unshaded cell must have a path through its edges with other unshaded cells to a border). Numbers outside the grid indicate the lengths of groups of shaded cells in that row/column, but not necessarily in order.

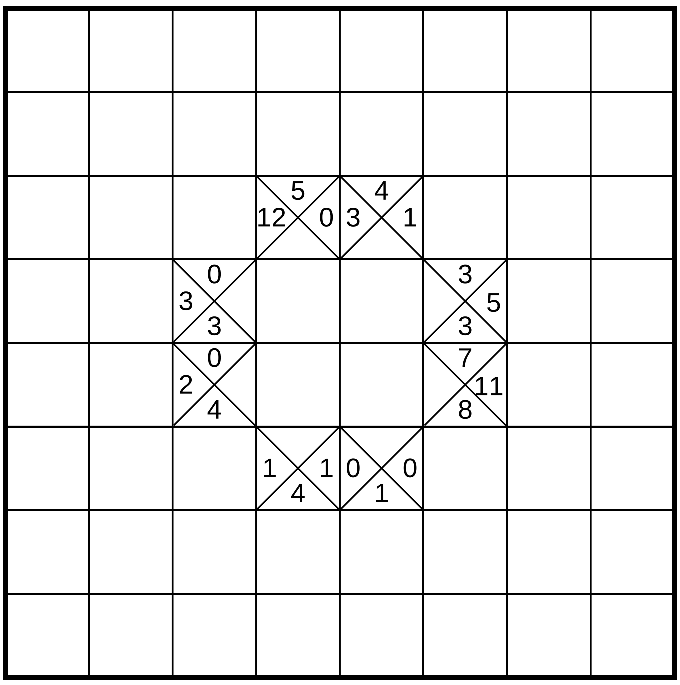
| | 1 1 2 | 3 4 | 1 1 2 | 2 3 | 3 3 | 1 2 2 | 2 2 |
|---|---|---|---|---|---|---|---|
| 1 2 | | | | | | | |
| 2 3 | | | | | | | |
| 1 1 2 | | | | | | | |
| 3 | | | | | | | |
| 1 1 1 | | | | | | | |
| 2 4 | | | | | | | |
| 1 1 | | | | | | | |
| 5 | | | | | | | |
| 1 1 2 | | | | | | | |

| | 1 2 3 | 1 1 4 | 1 4 | 1 1 2 | 4 | 2 3 | 1 1 2 | 1 1 2 | 2 4 |
|---|---|---|---|---|---|---|---|---|---|
| 2 4 | | | | | | | | | |
| 1 1 1 | | | | | | | | | |
| 1 4 | | | | | | | | | |
| 1 1 3 | | | | | | | | | |
| 1 3 | | | | | | | | | |
| 2 2 2 | | | | | | | | | |
| 1 1 2 | | | | | | | | | |
| 1 2 3 | | | | | | | | | |
| 2 3 | | | | | | | | | |

### 7-8) COMPASS (29 + 70 points)

Split the grid into orthogonally connected regions, one for each clue. The number at the top of a clue must be equal to the number of cells within the region that lie above the clue, regardless of horizontal position. The other numbers work analogously for cells to the right, below and to the left of the clue.



**9-10) LIGHTHOUSES (14 + 33 points)**

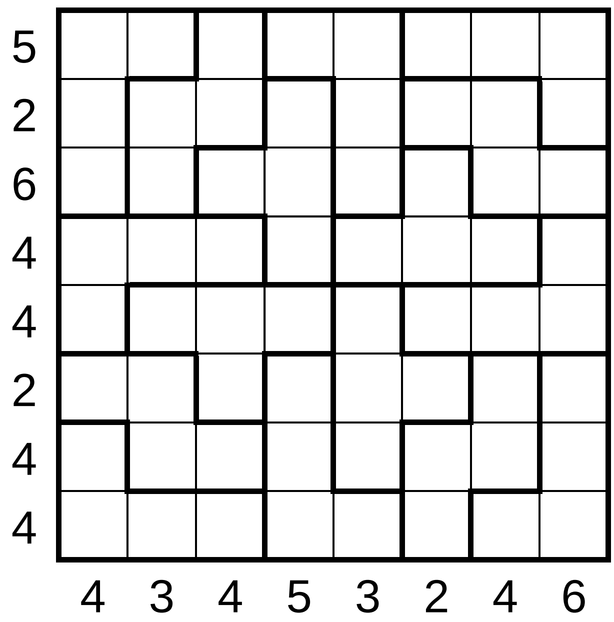
Locate some ships in the grid, each of size 1x1 cell. Each cell contains at most one ship. Two ships do not touch each other, not even diagonally. No ship can touch a lighthouse, not even diagonally. Numbers in cells with lighthouses indicate how many ships are in total located in the same row and in the same column.

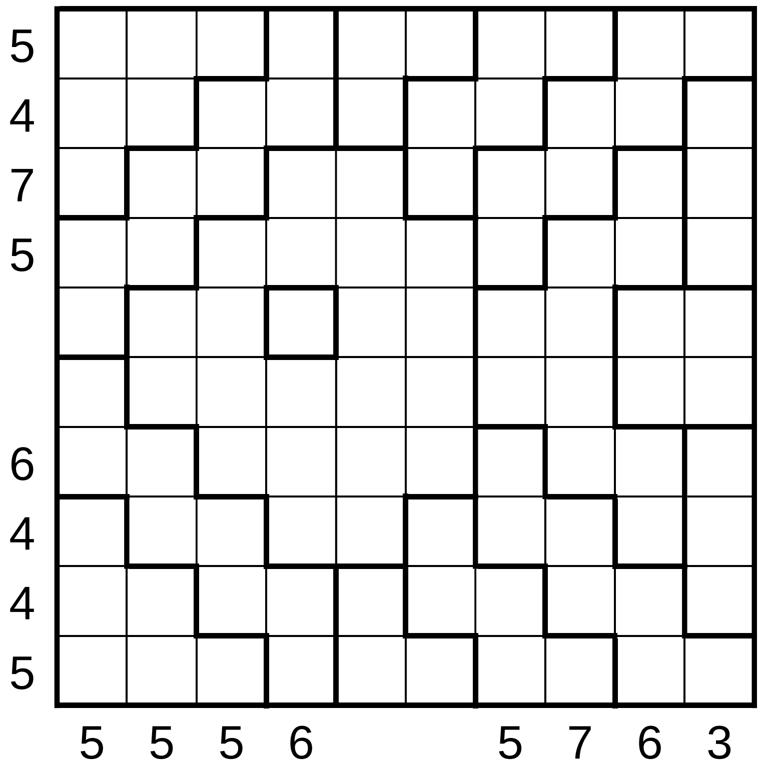
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | | | | | | | | | |
| | | | | | | | | 3 | |
| | | 3 | | | | | | | |
| | | | | | | 2 | | | |
| | | | | 4 | | | | | |
| | | | | | 3 | | | | |
| | | | 1 | | | | | | |
| | | | | | | | 4 | | |
| | 1 | | | | | | | | |
| | | | | | | | | | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5 | | | |
| | | | | | | | | 2 | | |
| | | | | | | 4 | | | | |
| 3 | | | | | | | | | | |
| | 5 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | 2 | |
| | | | | | | | | | | 6 |
| | | | | 1 | | | | | | |
| | | 1 | | | | | | | | |
| | | | 7 | | | | | | | |

**11-12) AQUARIUM (26 + 54 points)**

Shade some cells in the grid. In each outlined region, all cells in a row must be either all shaded or all unshaded, and all shaded cells must be connected to the bottom of the region (like when you pour water into a fish tank). Numbers outside the grid indicate the number of shaded cells in the respective row/column.



**13-14) NURIKABE (43 + 45 points)**

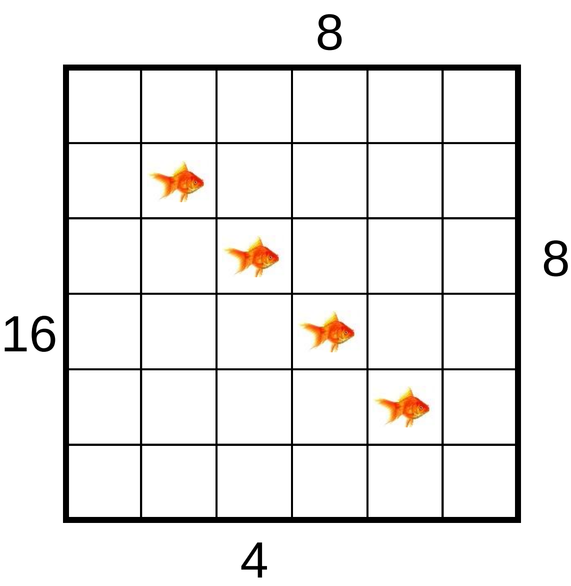
Shade some empty cells black so that the grid is divided into white areas, each containing exactly one number and with the same area in cells as that number. Two white areas may only touch diagonally. All black cells must be connected with each other, but no 2×2 group of cells can be entirely shaded black.

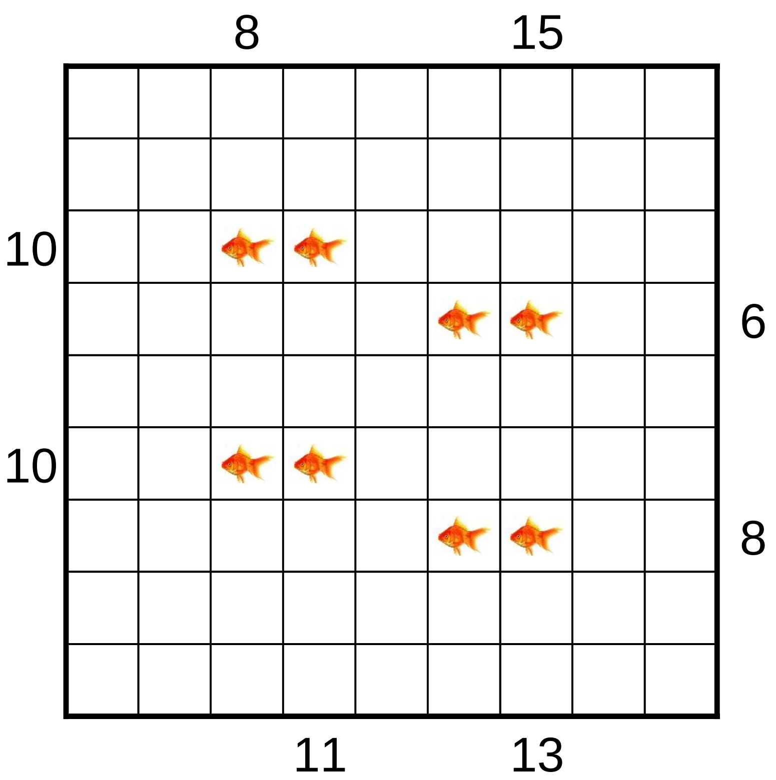
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | 2 | | | | | 4 | |
| | 6 | | | | | 5 | | |
| | | | | 2 | | | | |
| | | | | | | | | |
| | | | | 2 | | | | |
| | | 6 | | | | | 2 | |
| | 4 | | | | | 4 | | |
| | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | 5 | | 4 | | | |
| | 4 | | | | | | 2 | |
| | | | | | | | | |
| | | | 3 | | 2 | | | |
| | | | | | | | | |
| | 2 | | | | | | 6 | |
| | | | 1 | | 8 | | | |
| | | | | | | | | |

**15-16) ANGLERS (10 + 67 points)**

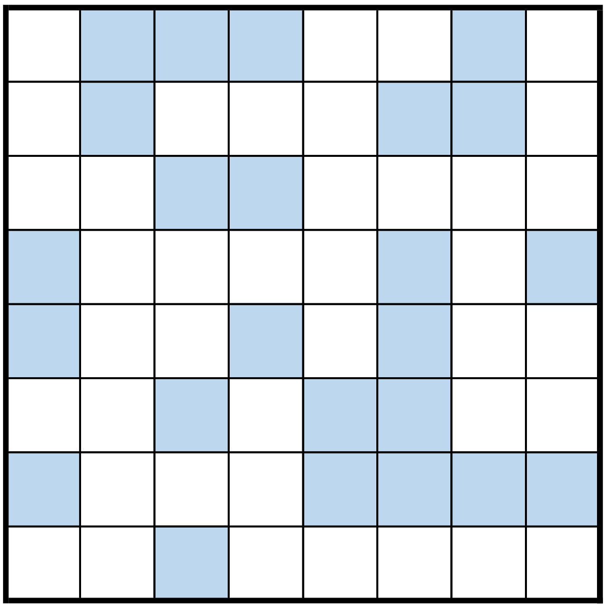
The grid represents a lake and the numbers on the periphery represent anglers (fishermen). The fishes shown in the lake are such that every angler gets exactly one fish. The numbers indicate the length of the fishlines which are composed of horizontal and vertical line segments. Draw the fishlines starting from grid border such that no two of them cross or overlap each other.

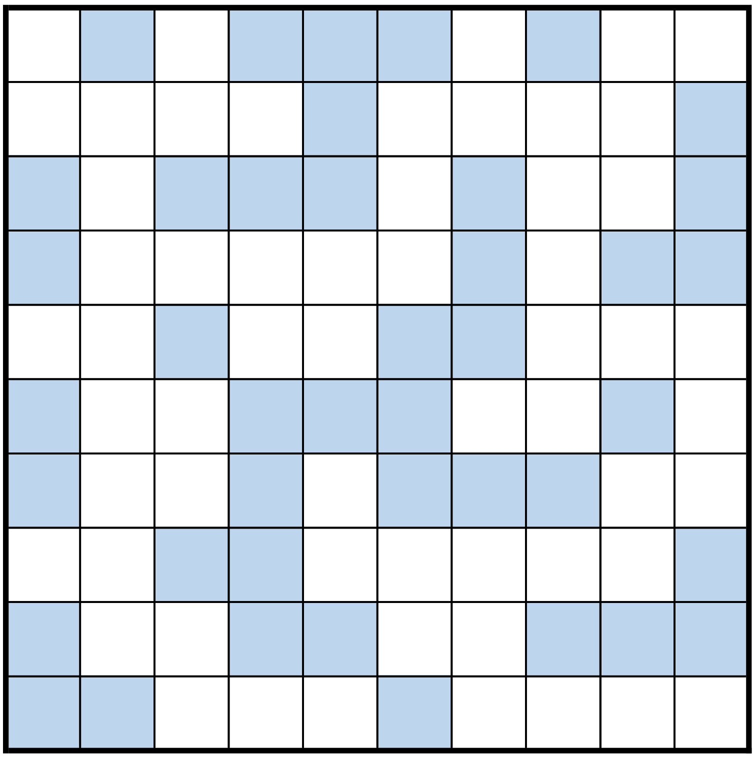


**17-18) LAND AND SEA (18 + 48 points)**

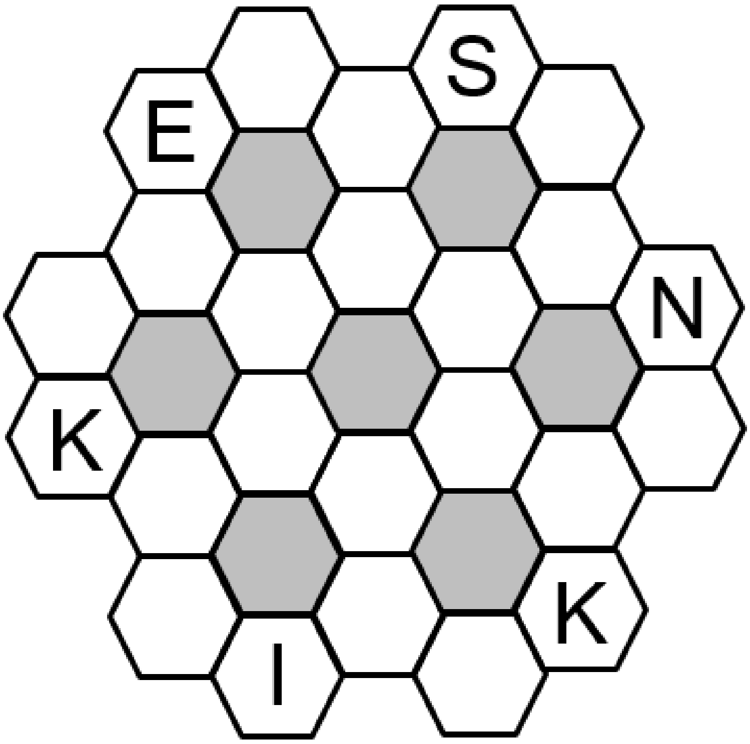
Draw a closed loop through all cells in the grid horizontally and vertically. The loop can't run through more than 2 white cells consecutively.





**19) SEA CREATURES (64 points)**

Write some of the words in the grid so that six cells around each grey cell contained all letters from one of the word, in any order. Some words will not be used. Each word can be used at most once.




GARNAT
KARETA
MECOUN
NARVAL
OLIHEN
REJNOK
SARDEL
SLAVKA
VORVAN
ZRALOK

# CZECH PUZZLE CHAMPIONSHIP 2018

PRAGUE, 19. – 20. 5. 2018

## 3rd INDIVIDUAL ROUND – SKY

## 35 minutes – 500 points

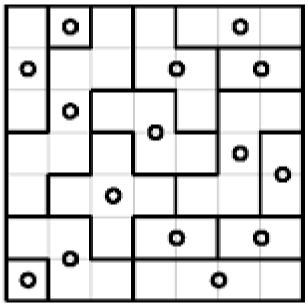
| | |
|---|---|
| 1-4) Spiral Galaxies | 35 + 30 + 30 + 50 points |
| 5-8) Starbattle | 10 + 15 + 30 + 65 points |
| 9-12) Clouds | 20 + 25 + 40 + 25 points |
| 13-16) Star Tracks | 20 + 25 + 45 + 35 points |

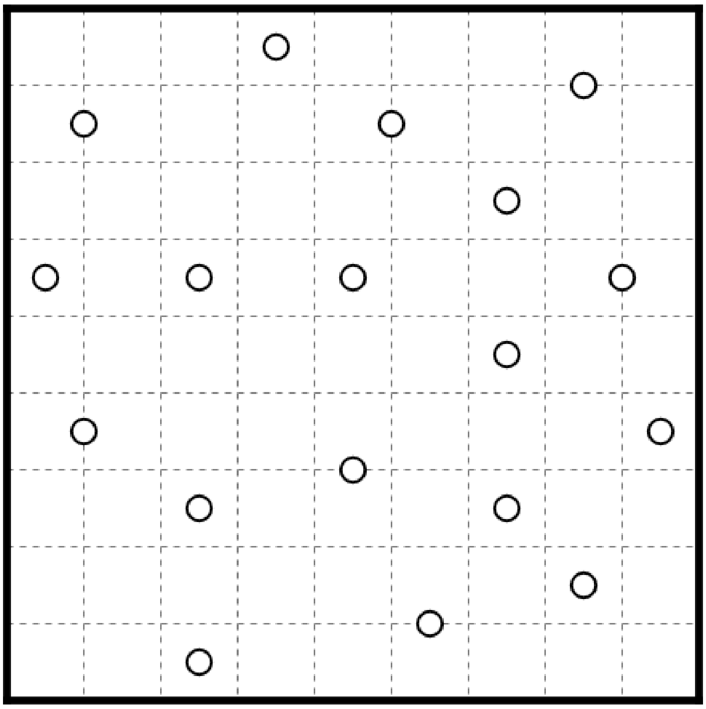
PUZZLE AUTHORS: Jan Zvěřina (1-5) Matúš Demiger (6-16)

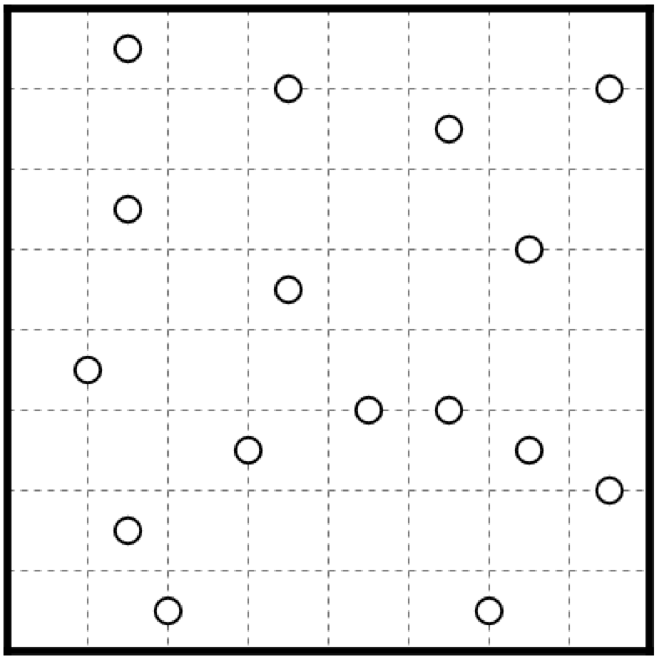
PUZZLE TESTERS: Štefan Gašpár, Matej Uher

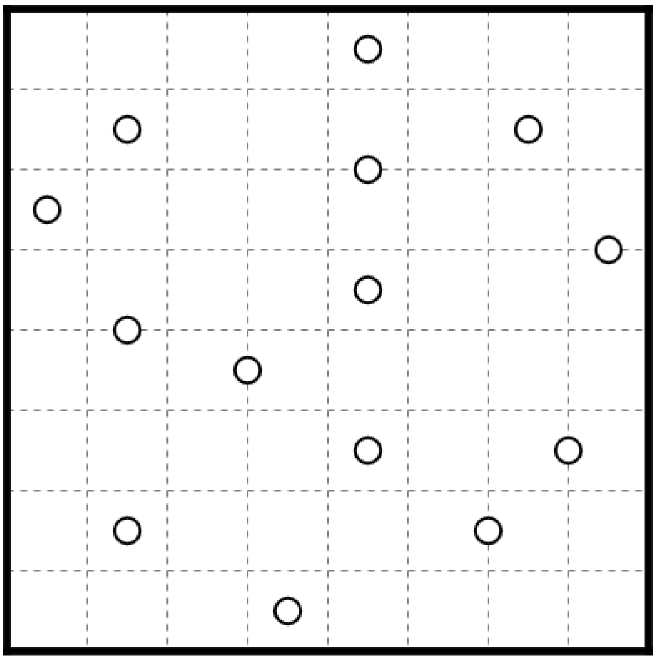
## 1-4) SPIRAL GALAXIES (35 + 30 + 30 + 50 points)

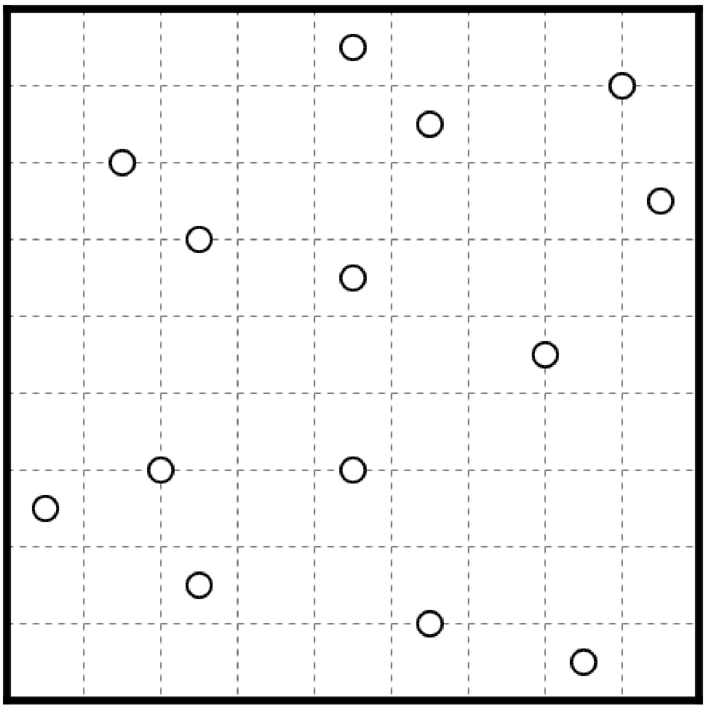
Divide the grid along the indicated lines into connected regions – “galaxies” – with rotational symmetry. Each cell must belong to one galaxy, and each galaxy must have exactly one circle at its center of rotational symmetry.



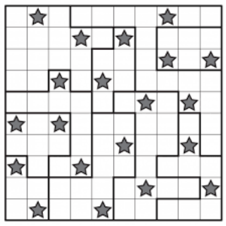




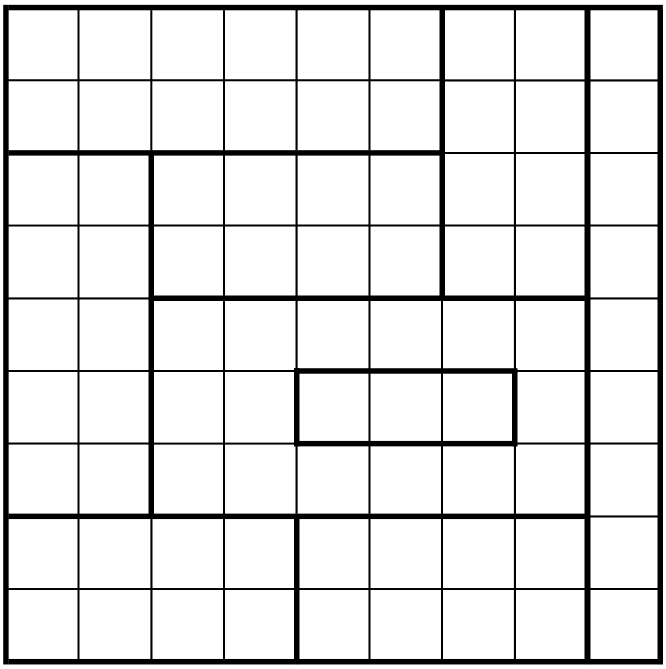


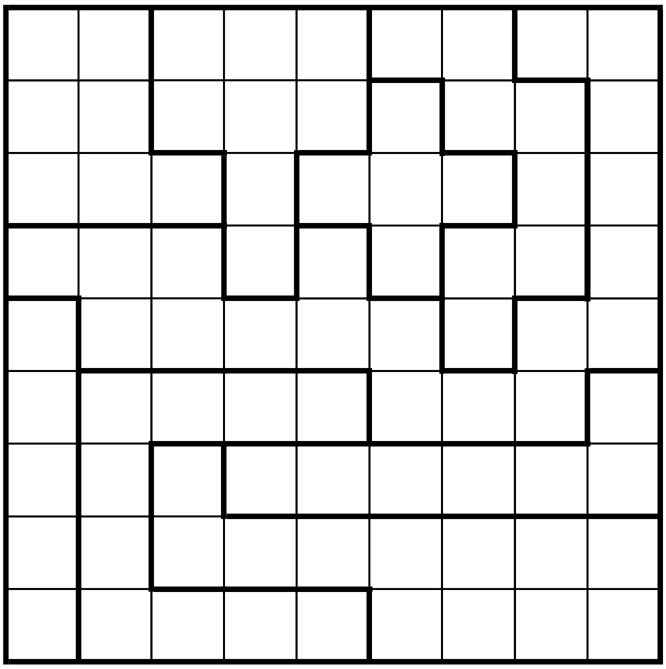


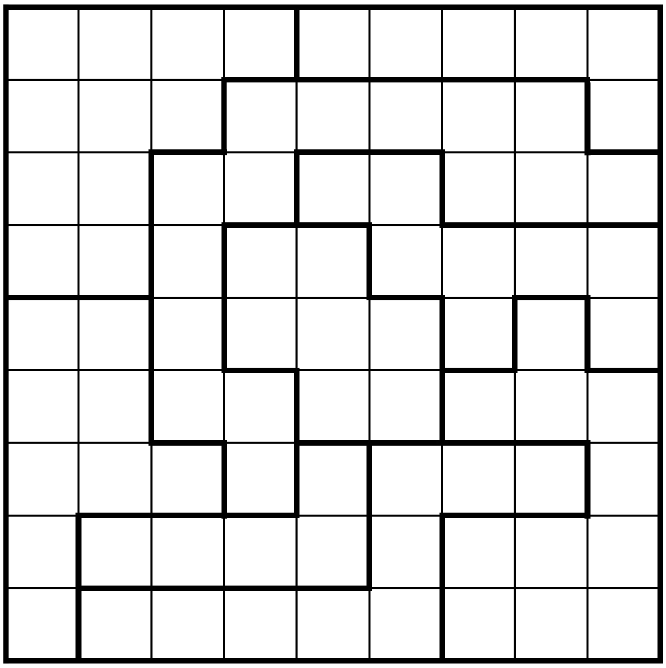
## 5-8) STARBATTLE (10 + 15 + 30 + 65 points)

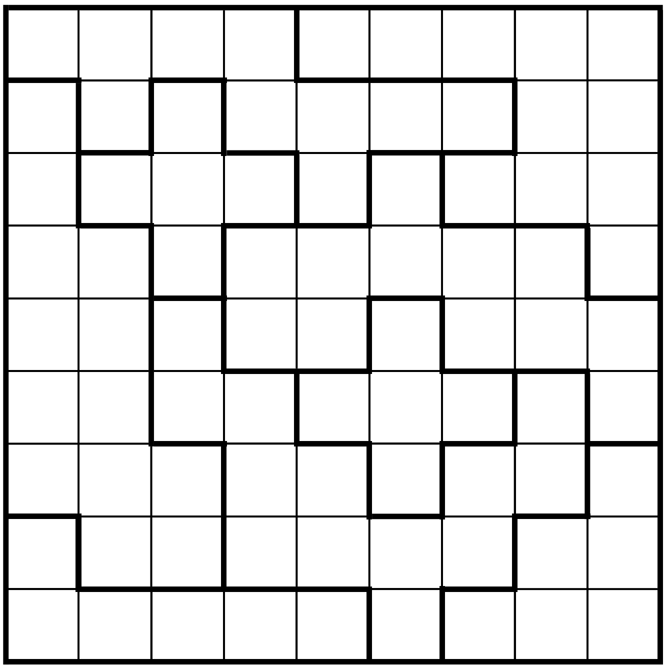


Fill some cells with stars so that each row, column, and bold region contains exactly two stars. Stars cannot be placed in any neighboring cells, including diagonally adjacent cells.



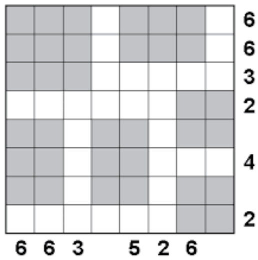






**9-12) CLOUDS (20 + 25 + 40 + 25 points)**

Place some rectangular clouds into the grid that do not touch each other, not even diagonally. Clouds are at least two cells wide and two cells long. The numbers outside the grid indicate the total number of cells covered by clouds in the corresponding direction.




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 2 |
| | | | | | | | | 5 |
| | | | | | | | | 5 |
| | | | | | | | | 2 |
| | | | | | | | | 4 |
| | | | | | | | | 2 |
| | | | | | | | | 6 |
| | | | | | | | | 4 |
| 3 | 5 | 2 | 4 | 2 | 5 | 7 | 2 | |

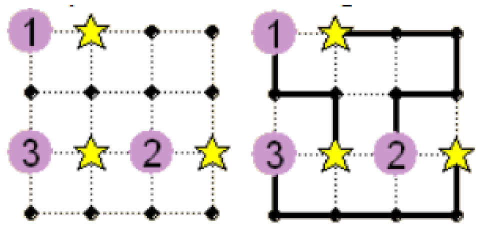
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 5 |
| | | | | | | | | | | 7 |
| | | | | | | | | | | 2 |
| | | | | | | | | | | 4 |
| | | | | | | | | | | 2 |
| | | | | | | | | | | 5 |
| | | | | | | | | | | 9 |
| | | | | | | | | | | 4 |
| | | | | | | | | | | 7 |
| | | | | | | | | | | 3 |
| 5 | 5 | 7 | 5 | 0 | 5 | 7 | 4 | 6 | 4 | |

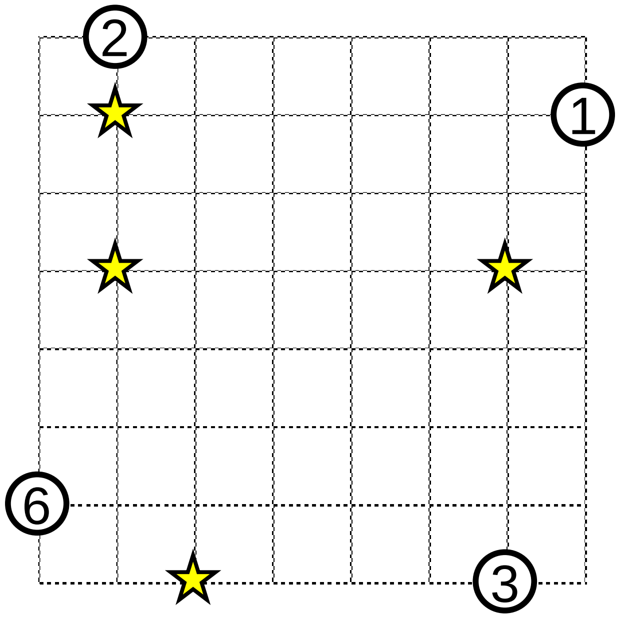
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 4 |
| | | | | | | | | | | 7 |
| | | | | | | | | | | 3 |
| | | | | | | | | | | 5 |
| | | | | | | | | | | 8 |
| | | | | | | | | | | 3 |
| | | | | | | | | | | 4 |
| | | | | | | | | | | 7 |
| | | | | | | | | | | 7 |
| | | | | | | | | | | 3 |
| 4 | 7 | 7 | 3 | 4 | 7 | 5 | 4 | 7 | 3 | |

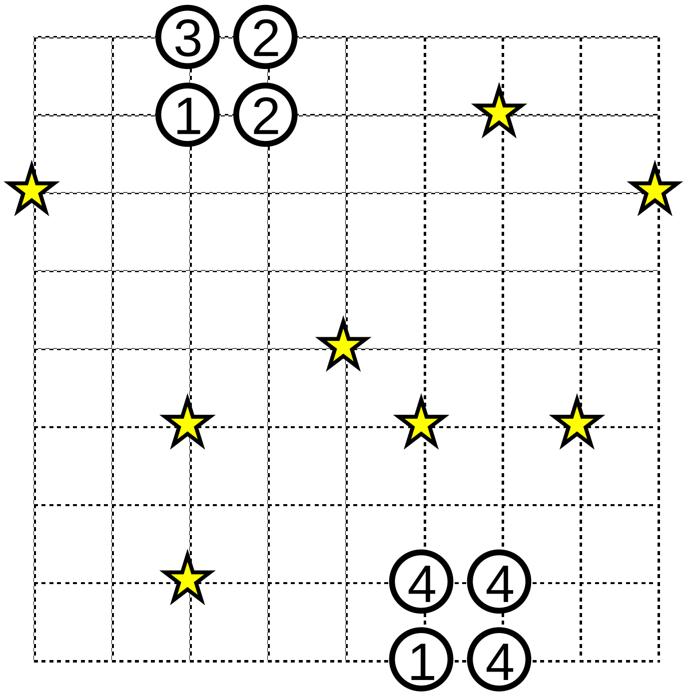
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 4 |
| | | | | | | | | 6 |
| | | | | | | | | 4 |
| | | | | | | | | 2 |
| | | | | | | | | 4 |
| | | | | | | | | 7 |
| | | | | | | | | 7 |
| | | | | | | | | 3 |
| 6 | 6 | 3 | 2 | 5 | 3 | 6 | 6 | |

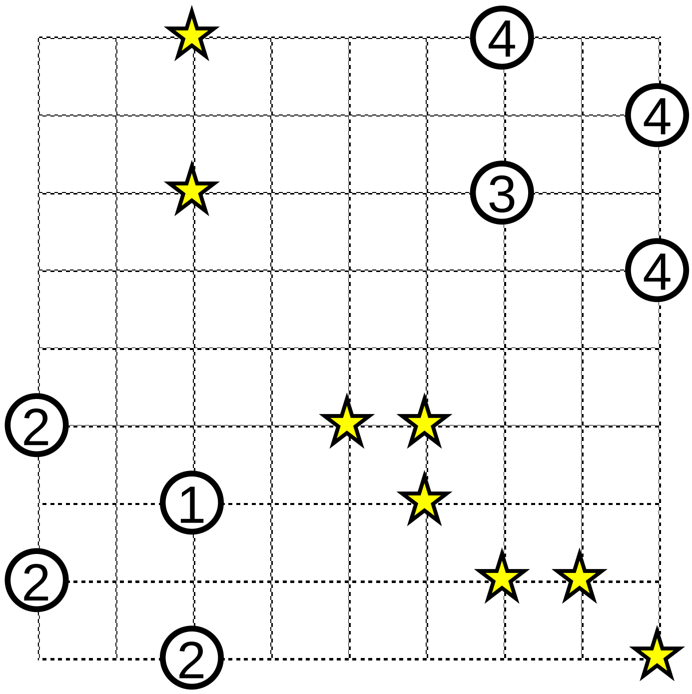
**13-16) STAR TRACKS (20 + 25 + 45 + 35 points)**

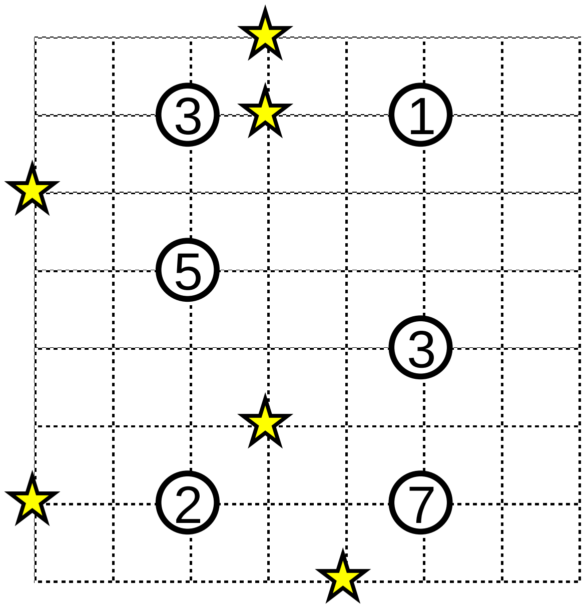
Connect every circle with exactly one star by a path along the grid lines. The number in a circle indicates the lengths of the longest straight line of the path. All the intersections of the dotted lines must be visited exactly once. Each star must be connected to exactly one circle.









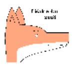


# CZECH PUZZLE CHAMPIONSHIP 2018

PRAGUE, 19. – 20. 5. 2018

## 4th INDIVIDUAL ROUND – COUNTRYSIDE

## 60 minutes – 650 points

| | | |
|---|---|---|
| 1-2) Sheep and Wolves | 32 + 52 points | |
| 3-4) Forest Walk | 8 + 16 points | |
| 5) Vegetable Garden | 54 points | |
| 6-7) Tents | 20 + 23 points | |
| 8) Pentominous | 39 points | |
| 9-10) Lakes | 33 + 67 points | |
| 11-12) Snails | 25 + 18 points | |
| 13-14) Fillomino | 14 + 95 points |  |
| 15-16) Cave | 24 + 56 points | |
| 17-18) Country Roads | 33 + 41 points | |

KROPÁČEK LEGAL
ADVOKÁTNÍ KANCELÁŘ/LAW OFFICES

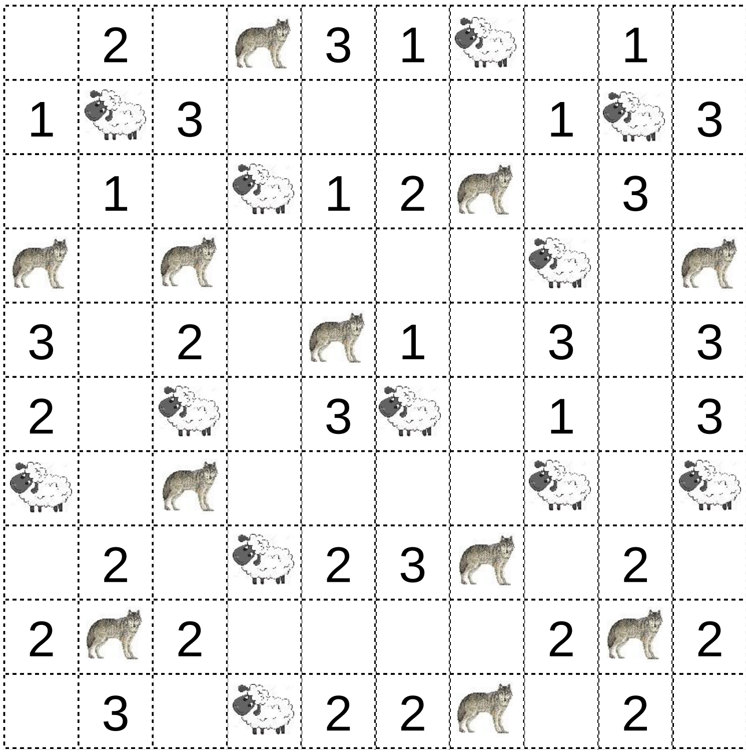
givt
Klikni a pomáhej

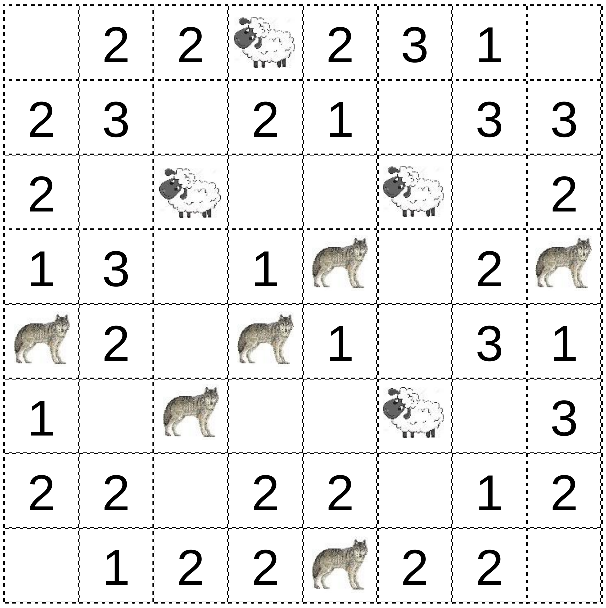
PUZZLE AUTHORS: Jan Zvěřina (1-3, 5-8, 11-12, 18), Matúš Demiger (4, 9-10, 13-17)

PUZZLE TESTERS: Štefan Gašpár, Matej Uher

### 1-2) SHEEP AND WOLVES (32 + 52 points)

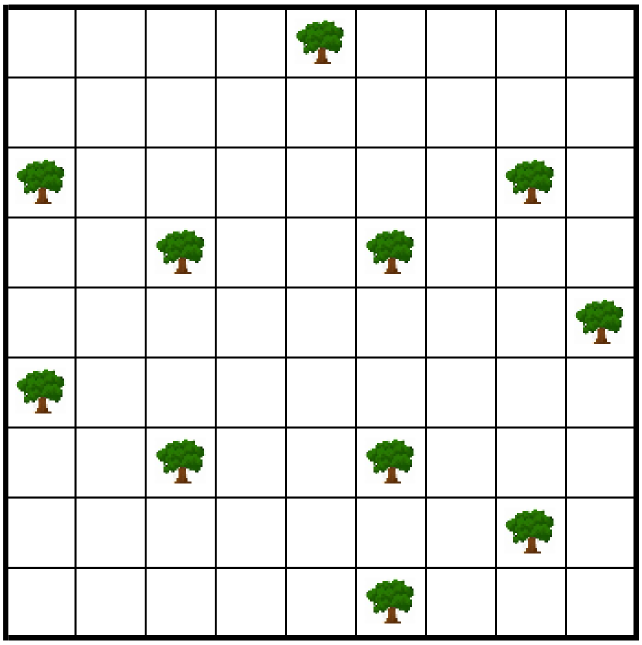
Draw a single closed loop by making vertical and horizontal connections between the dots. Each number in the grid represents how many of the 4 possible edges surrounding that square are part of the loop. Wolves must be kept outside the loop and sheep must be kept inside the loop.

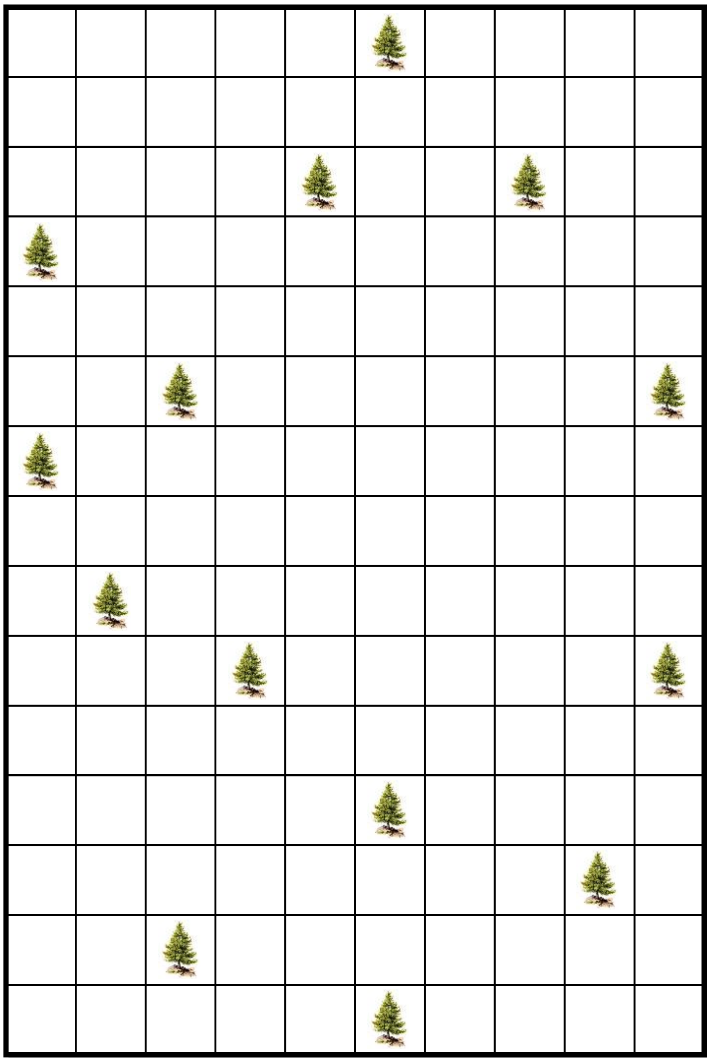




### 3-4) FOREST WALK (8 + 16 points)

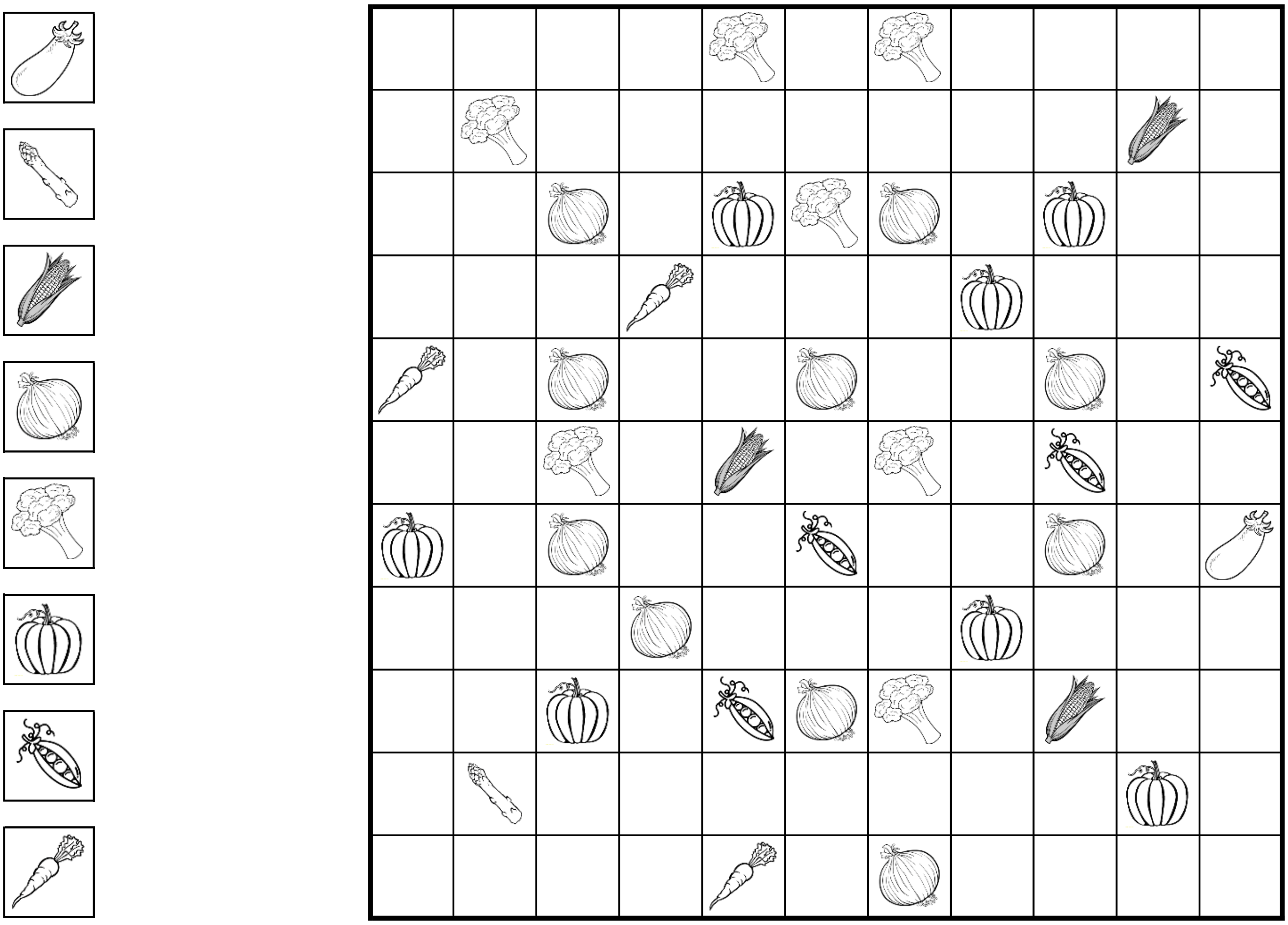
Draw a single, non-intersecting loop that passes through the centers of all white cells. The loop can not pass through the cells with trees.





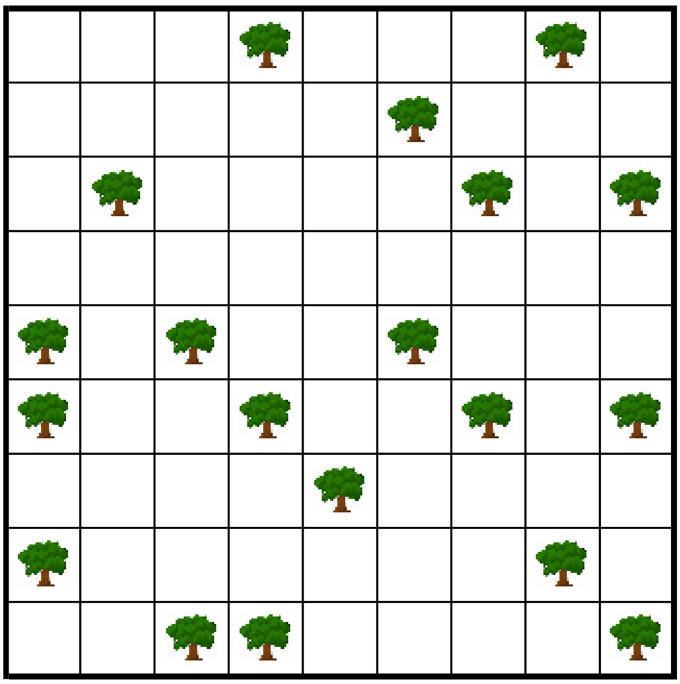
## 5) VEGETABLE GARDEN (Coded Shikaku) (54 points)

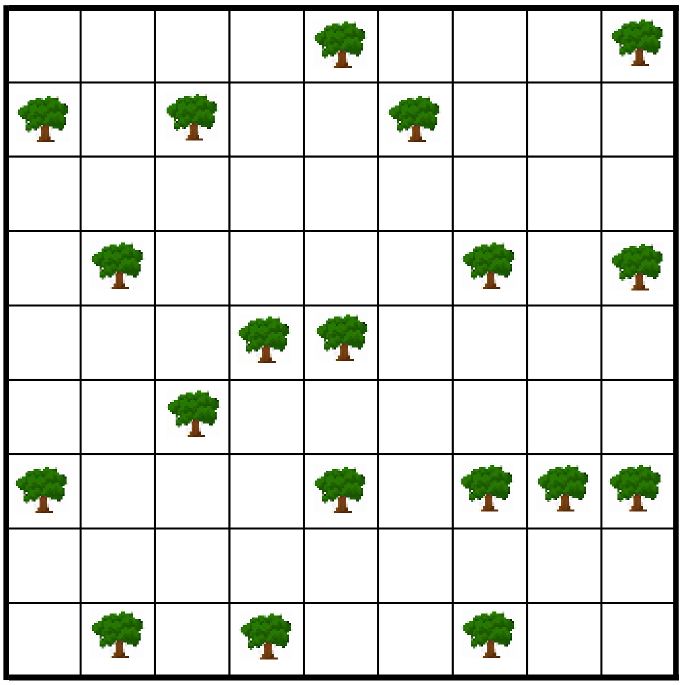
Divide the grid in a number of non-overlapping rectangles along the grid lines. Symbols code numbers. Same symbols stand for the same number. Different symbols stand for different numbers. Symbols in the grid indicate the size of the rectangle they are in. No rectangle can contain more than one symbol.

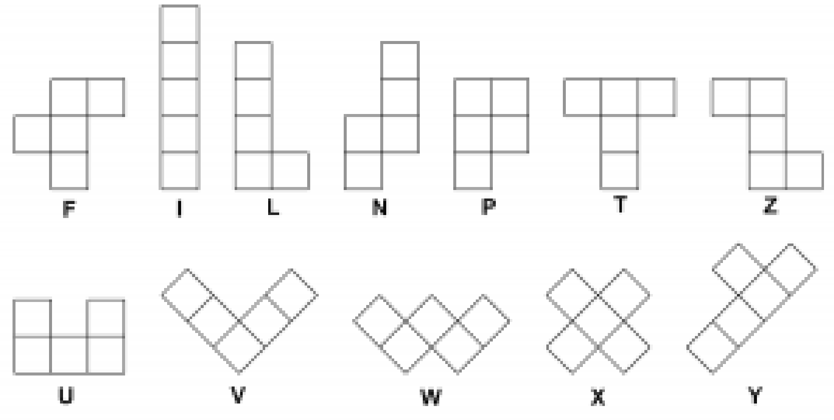


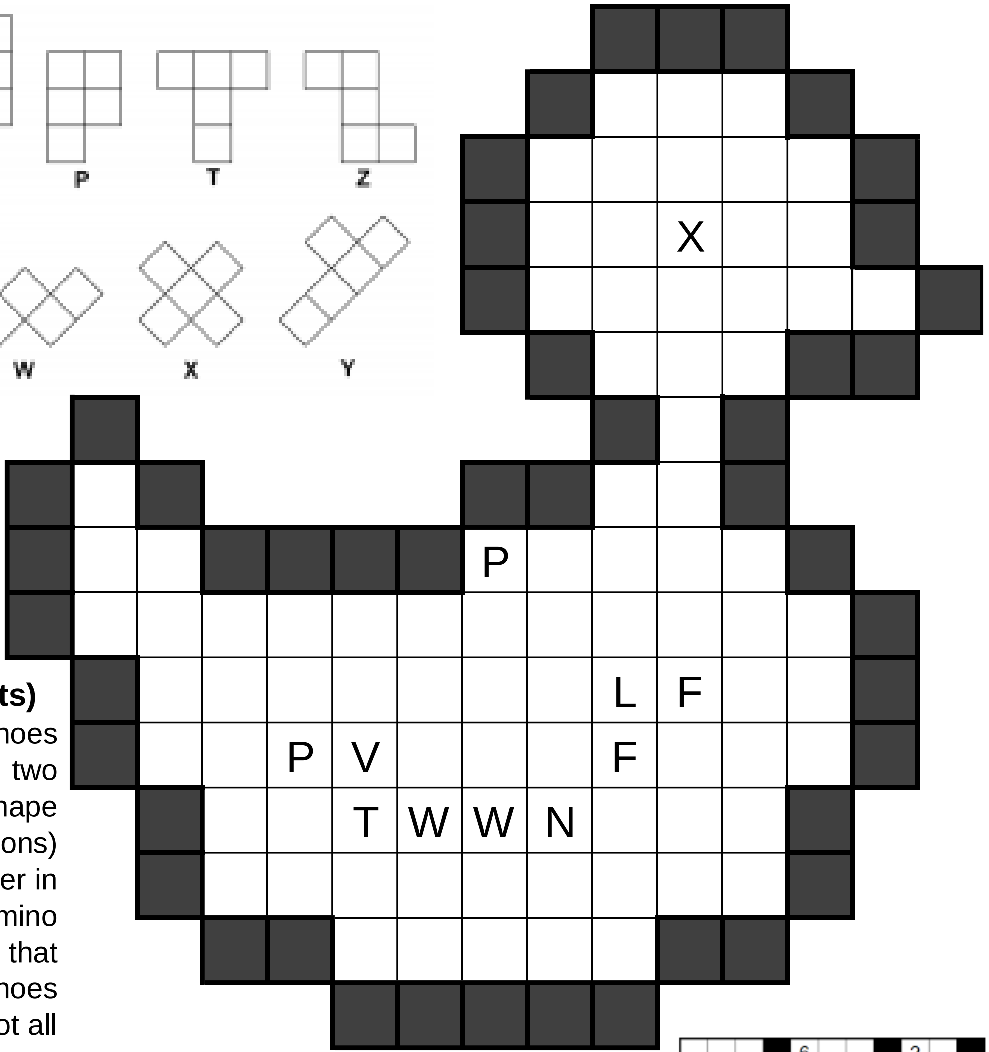
## 6-7) TENTS (20 + 23 points)

Locate the tents in the grid. Trees(T) and tents appears in distinch pairs, in horizontally or vertically adjacent squares. Tents do not tuch each other, not even diagonally.

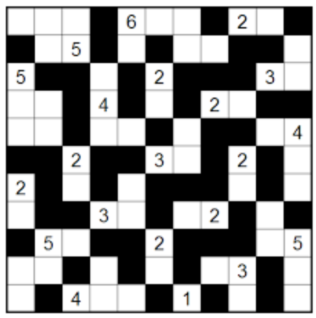







**8) PENTOMINOUS (39 points)**
Divide the grid into pentominoes (five-cell regions) so that no two pentominoes of the same shape (including rotations/reflections) share an edge. A cell with a letter in it must be part of the pentomino shape normally associated with that letter. An inventory of pentominoes is given below the puzzle but not all shapes must be used.



**9-10) LAKES (33 + 67 points)**
Shade some cells black (leaving the other cells white) so that the grid is divided into regions; cells of the same color are considered in the same region if they are adjacent horizontally or vertically. Each given number must be in a white region that has the same area in cells as that number. Each white region must have exactly one given number.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 1 | | | | |
| | | 5 | | | | | | |
| | | | | | 6 | | 4 | |
| | | 6 | | | | | | |
| 2 | | | | 3 | | | | 3 |
| | | | | | | 1 | | |
| | 4 | | 4 | | | | | |
| | | | | | | 3 | | |
| | | | | 4 | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3 | | | | | | | |
| | | | 5 | | | | | 2 |
| | | | | | 3 | | | |
| | | 3 | | | | | 6 | |
| | | | | | | | | |
| | 4 | | | | | 3 | | |
| | | | 5 | | | | | |
| 5 | | | | | 5 | | | |
| | | | | | | | 5 | |

**11-12) SNAILS (25 + 18 points)**

Place four given words into the labyrinth. Each labyrinth has four entrances, each entrance will use exactly one word. The letters from each word must be placed in exact order starting from the entrance. There can be empty cells between letters. Cells with a dash may not contain a letter. No letter may repeat in any row or column. *Please note that in Czech language „CH“ is a single letter.*

KACENKA KOLODEJ

OPENKA PYCHAVKA

| | | | | | |
|---|---|---|---|---|---|
| | | – | | | |
| | | | | | |
| | | | | | |
| | | | – | | |
| | | | | | |
| | | | – | | |

CIROK KUKURICE

PROSO PSENICE

| | | | | | |
|---|---|---|---|---|---|
| | | | | – | |
| | | – | | | – |
| | | | | | |
| – | | | | – | |
| | | | | | |
| | | | | | |

**FILLOMINO (14 + 95 points)**

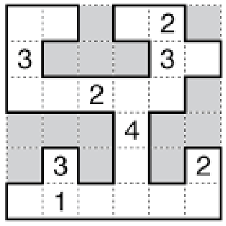
Divide the grid along the dotted lines into regions called polyominoes so that no two polyominoes with the same area share an edge. Inside some cells are numbers; each number must represent the area of the polyomino it belongs to. A polyomino may contain zero, one, or more of the given numbers. (It is possible for a “hidden” polyomino — a polyomino without any of the given numbers — to contain a value that is not present in the starting grid such as a 6 in a puzzle with only 1-5 clues.)


| | | | | | | |
|---|---|---|---|---|---|---|
| | 3 | 5 | | | | |
| 3 | 1 | 2 | | | | |
| 9 | 4 | | 5 | | | |
| | | 5 | | 8 | | |
| | | | 4 | | 4 | |
| | | | | 9 | 6 | |
| | | | | | | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 8 | | | | | | 2 | | |
| | 7 | | 6 | | | | 2 | | 7 | |
| | 1 | | | 3 | | 8 | | | 1 | |
| | 5 | | | 1 | | 1 | | | 3 | |
| | | 2 | | 5 | 3 | 4 | | 3 | | |
| | | | 7 | | | | 6 | | | |
| | | 6 | | | | | | 7 | | |
| | 6 | | | | | | | | 4 | |
| 7 | | | 2 | | | | 3 | | | 10 |
| 3 | | | | | 3 | | | | | 4 |
| 8 | | | | | 10 | | | | | 9 |
| | 4 | | | | | | | | 7 | |
| | | 4 | 8 | | | | 5 | 1 | | |
| | | | | 3 | 4 | 10 | | | | |

**15-16) CAVE (24 + 56 points)**

Shade some cells to leave behind a single connected group — the cave — with no enclosed, shaded cells. In other words, all shaded cells must be connected by 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 count of cells connected vertically and horizontally to the numbered cell *including the cell itself*.

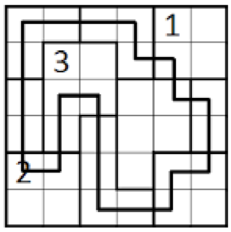


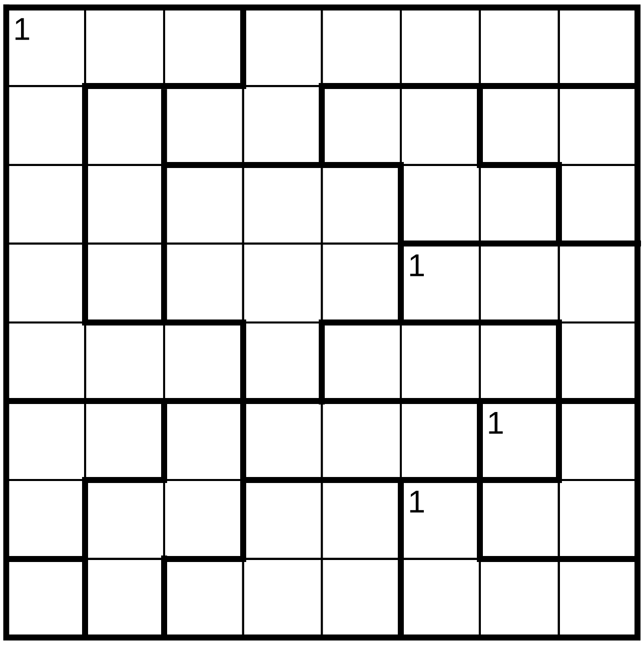
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 4 | | | 9 | | |
| | 3 | | | | | 4 | |
| 8 | | | | | | | 9 |
| | | | | | | | |
| | | | | | | | |
| 4 | | | | | | | 8 |
| | 3 | | | | | 4 | |
| | | 7 | | | 8 | | |

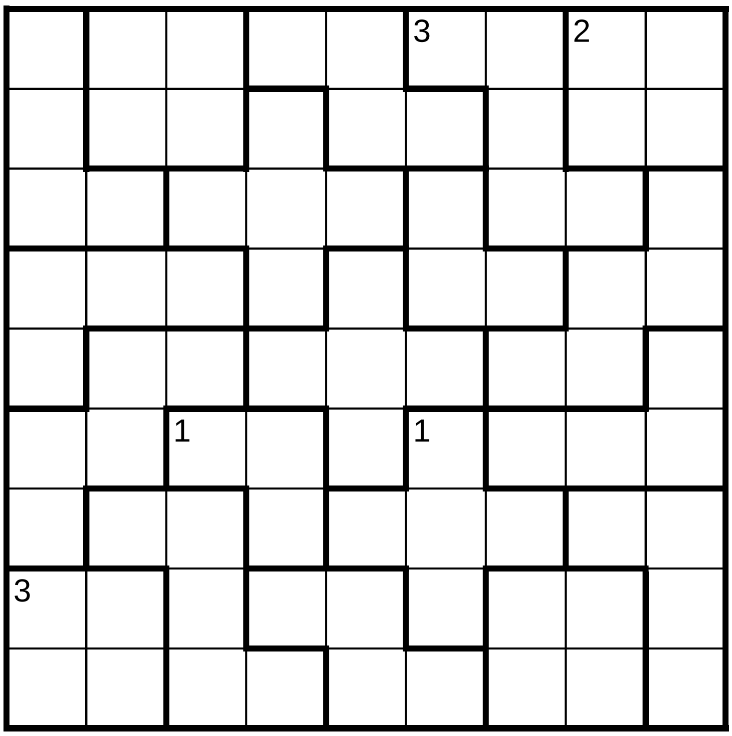
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 3 | | | 4 | | | |
| | | 5 | | | | | 7 | | |
| | 6 | | | | 6 | | | 6 | |
| 4 | | | | | | 8 | | | 4 |
| | | | | | | | 4 | | |
| | | 4 | | | | | | | |
| 5 | | | 5 | | | | | | 3 |
| | 4 | | | 11 | | | | 6 | |
| | | 8 | | | | | 10 | | |
| | | | 3 | | | 6 | | | |

**17-18) COUNTRY ROADS (33 + 41 points)**

Draw a single non-intersecting loop in the grid that enters and exits each bold region exactly once. If a number clue is given in a region, that number indicates the exact number of cells used by the loop in the region. Unused cells cannot be orthogonally adjacent across different regions.







# CZECH PUZZLE CHAMPIONSHIP 2018

PRAGUE, 19. – 20. 5. 2018

## 5th INDIVIDUAL ROUND – AROUND THE WORLD

## 40 minutes – 400 points

| | |
|---|---|
| 1) Slovak Sums | 38 points |
| 2) Czech Pentominoes | 60 points |
| 3) Japanese Sums | 32 points |
| 4) Find Ten Differences | 30 points |
| 5) Grid Division | 39 points |
| 6) Climbers | 55 points  |
| 7) Pyramide | 32 points |
| 8) Tourists and Cannibals | 50 points |
| 9) Boomerangs | 28 points |
| 10) Australian Snake | 36 points |

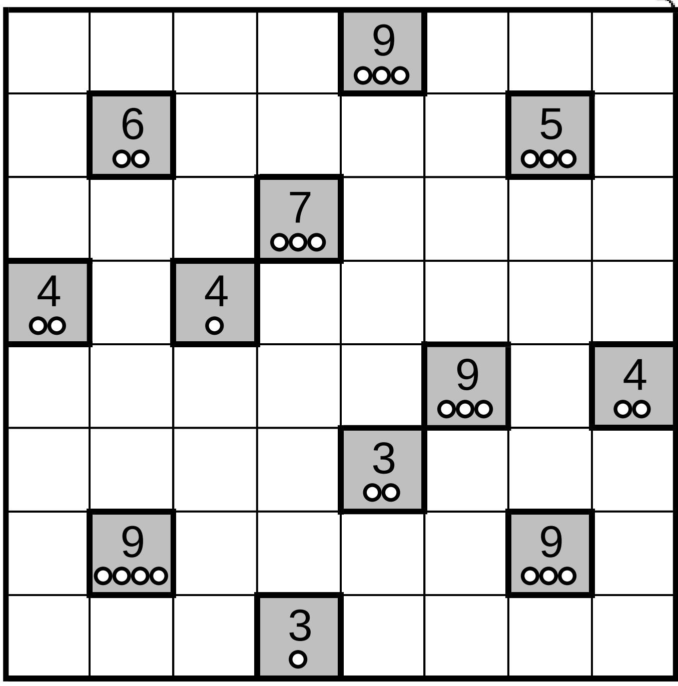
PUZZLE AUTHORS: Jan Zvěřina (1, 3-5, 7, 9-10) Matúš Demiger (2, 6, 8)

PUZZLE TESTERS: Štefan Gašpár, Matej Uher

# EUROPE

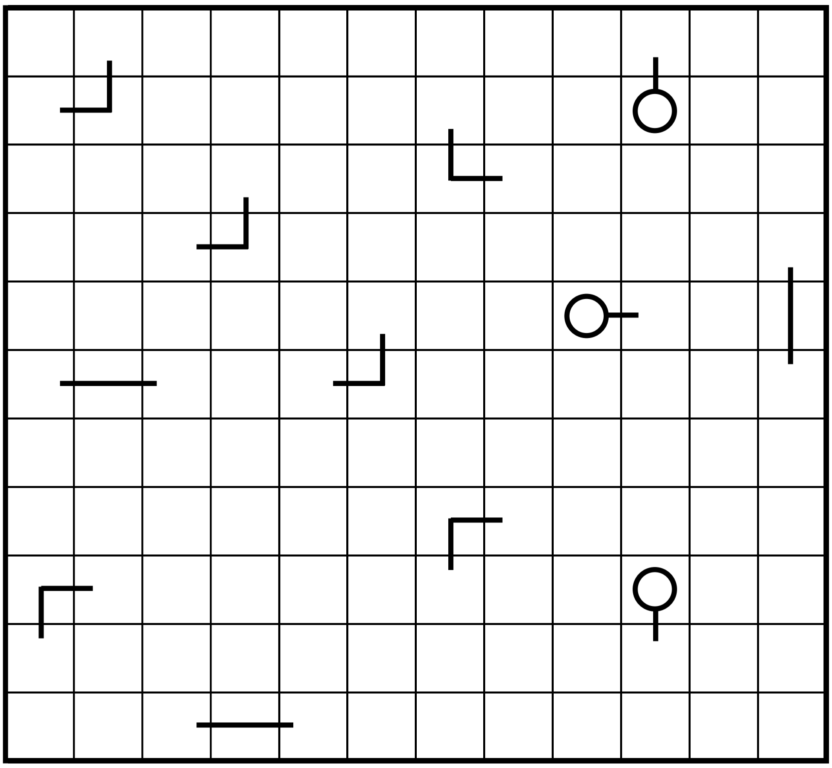
## 1) SLOVAK SUMS (38 points)

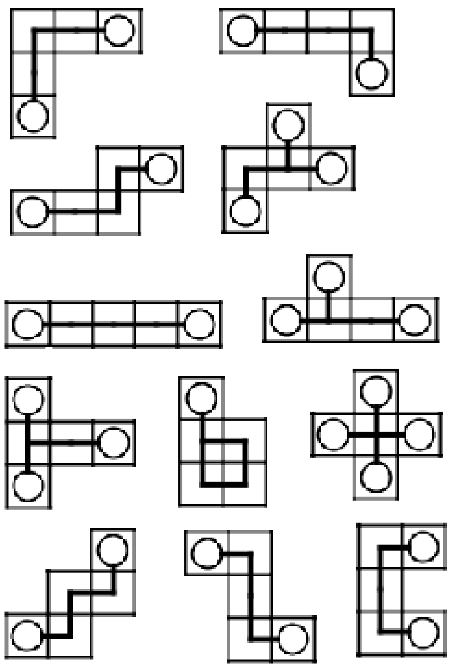
Place digits from 1 to 4 in some blank cells so that each digit appears exactly once in each row and column.  Clue numbers indicate the sum of orthogonally adjacent digits. The number of circles under a clue number indicates the number of cells that should have a digit placed in them.




## 2) CZECH PENTOMINOES (60 points)

Place 12 pentominoes into the grid, each is used exactly once. Rotation and reflection is allowed. Pentominoes may not touch each other, not even diagonally. Pentominoes are drawn as wires in the grid, dead ends are marked with a circle. Exactly one cell from each pentomino is given.





# ASIA

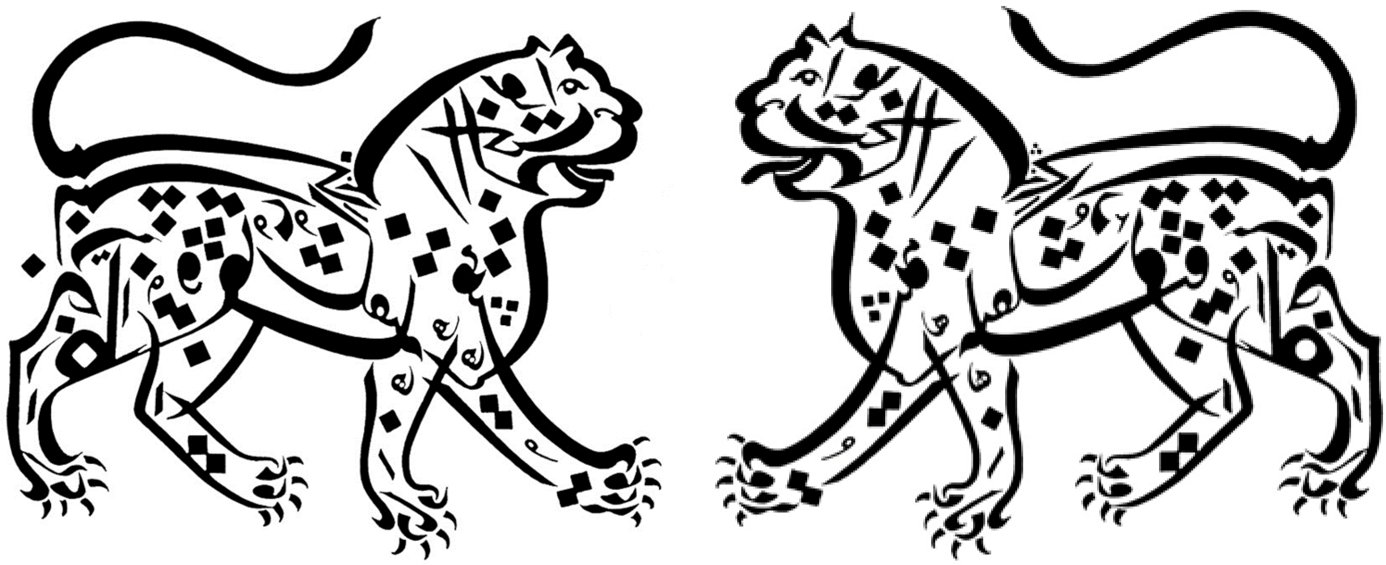
### 3) JAPANESE SUMS (32 points)

Place the digits 1-9 in some of the cells, so that no digit is repeated in any row or column. Numbers on the outside of the grid indicate the sums of adjacent digit groups in that row or column, in order. Each sum is separated by at least one unused cell.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 8 | 1 | | 7 | | | |
| | | | | 9 | 3 | | 6 | 14 | | 4 |
| | | | | 7 | 4 | | 6 | 11 | 27 | 14 |
| | | | 41 | 6 | 10 | 31 | 5 | 7 | 5 | 21 |
| 9 | 13 | 4 | | | | | | | | |
| 6 | 2 | 11 | | | | | | | | |
| | | 44 | | | | | | | | |
| 13 | 13 | 13 | | | | | | | | |
| 5 | 5 | 5 | | | | | | | | |
| 11 | 23 | 5 | | | | | | | | |
| 9 | 7 | 8 | | | | | | | | |
| | 16 | 25 | | | | | | | | |

### 4) FIND TEN DIFFERENCES – BENGAL TIGER (15 / 30 points)

Two mirror-inverted pictures differ in ten small details. Find all the differences and mark them in one of the pictures. If you find only nine, you get half of the points. If you mark more than ten differences, you score 0 points.

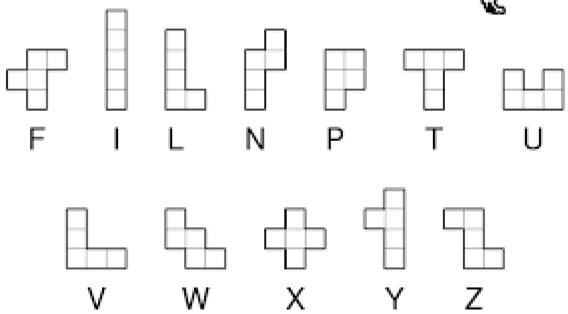


# AMERICA

### 5) GRID DIVISION – TWELVE SHOSHONS (39 points)

Divide the grid into 12 different pentominoes so that each cell was part of exactly one region. Each region contains five letters that together form a word „SOSON“.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S | O | N | S | N | O | O | N | O | O |
| S | S | S | O | O | N | S | O | N | O |
| O | S | S | S | S | O | S | S | S | O |
| O | O | N | S | O | N | O | O | S | O |
| O | N | S | O | N | S | S | O | N | S |
| O | N | S | O | O | S | N | S | S | S |




### 6) CLIMBERS – MEXICAN POPOCATEPETL (55 points)

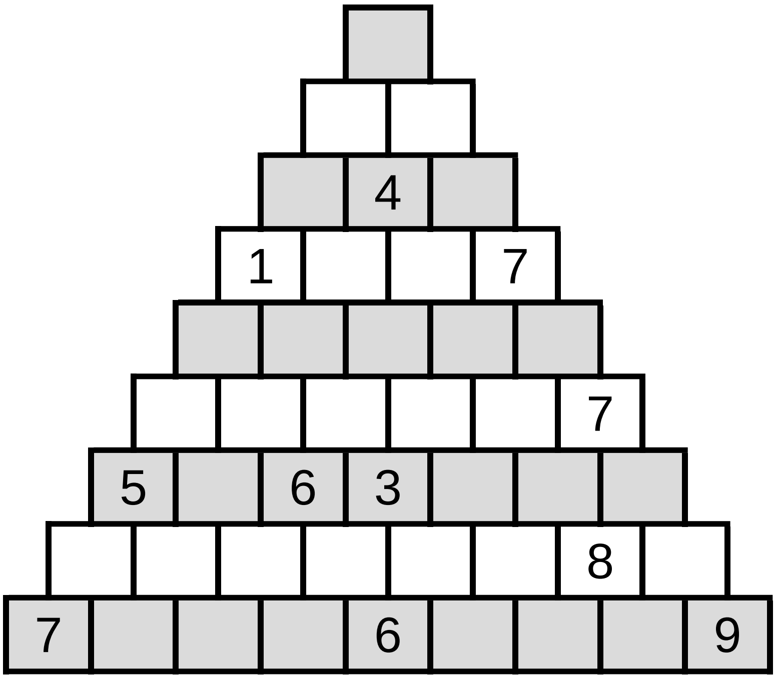
There are some climbers under the grid (their number is the same as the number of cells in the bottom row). Each climber moves only upwards on the pyramide and never crosses the same letter twice. Each climber reaches different height. Draw the paths of all climbers. Paths may not cross each other.

C
P R
A H A
Z D G M
O I H J S
M E X I K O
Y U C A T A N
T O R T I L L A
J A L A P E N O S
I T L C R V H M D R
B S U A T T N O B Z K
P O P O C A T E P E T L

# AFRICA

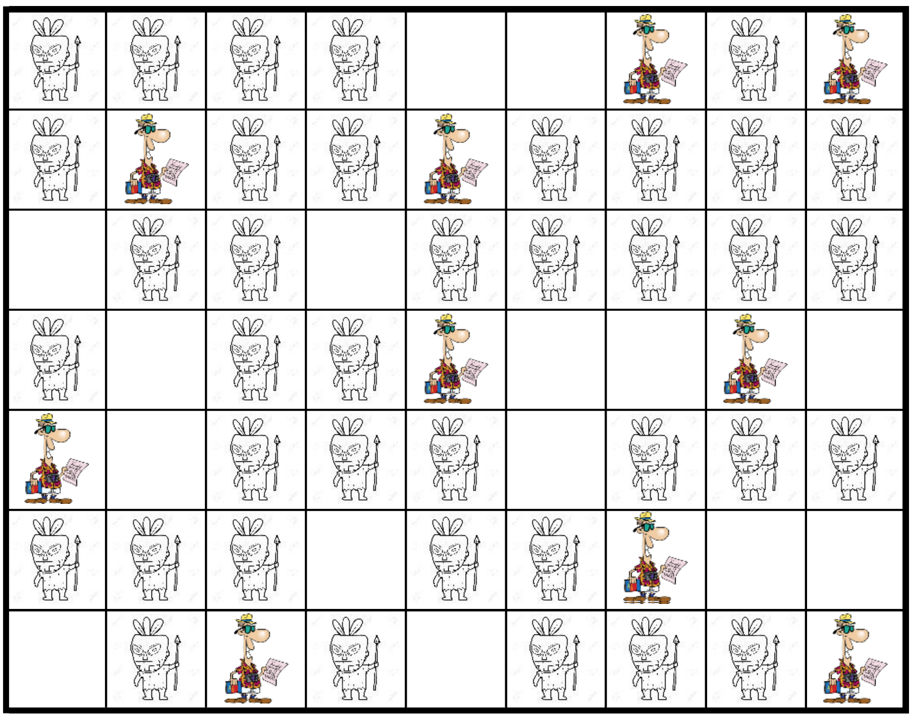
### 7) PYRAMIDE – EGYPTIAN PYRAMIDES (32 points)

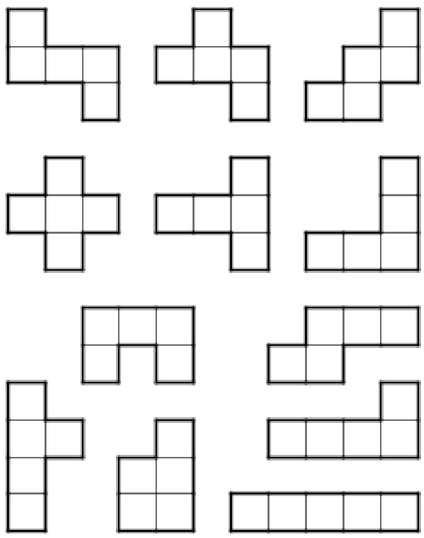
Fill all cells with numbers from 1 to 9. In grey rows numbers may not repeat. In white rows at least one number must repeat. For each row above the 'base' of the pyramid, each grey cell must equal either the sum or the difference of the two grey cells diagonally 'beneath' it.




### 8) TOURISTS AND CANNIBALS (50 points)

There are tourists and cannibals in the grid. Divide the grid into 12 different pentominoes so that each pentomino contains exactly four persons. No pentomino can contain more cannibals than tourist (there can be no tourists in a region). Some cells will not be part of any pentomino but all persons must be located in pentominoes. Pentominoes may not overlap but can be rotated or reflected.

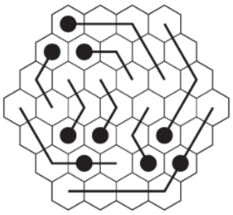


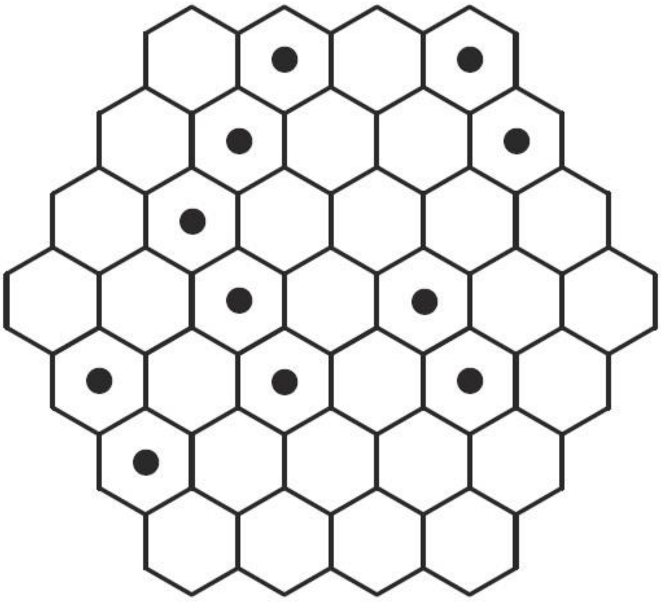


# AUSTRALIA

**9) BOOMERANGS (28 points)** MORE SOLUTIONS

Divide the grid into 12 boomerangs so that each has two arms that have the same lenght and have angle 120°. Each boomerang contains exactly one dot. No cell may remain empty.





**10) AUSTRALIAN SNAKE (36 points)** MORE SOLUTIONS

Locate a “snake” in the grid. The snake is a path that starts in a cell, goes through some number of cells orthogonally, and ends in a cell. Each cell is used at most once by the snake. The snake may not touch itself, not even diagonally. (In other words, if two cells in the snake touch orthogonally, then they must be exactly one cell apart along the path of the snake, and if two cells in the snake touch diagonally, then they must be exactly two cells apart along the path of the snake.) Numbers in the grid indicate how many neighbouring cells are occupied by the snake. The cells with numbers may not be part of the snake. The head and tail of the snake are not given.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3 | | | | | |
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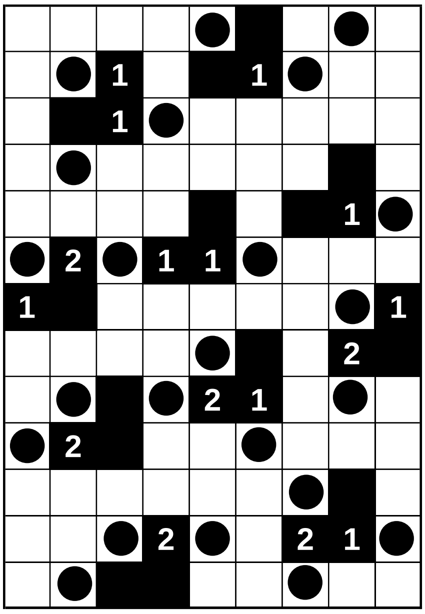


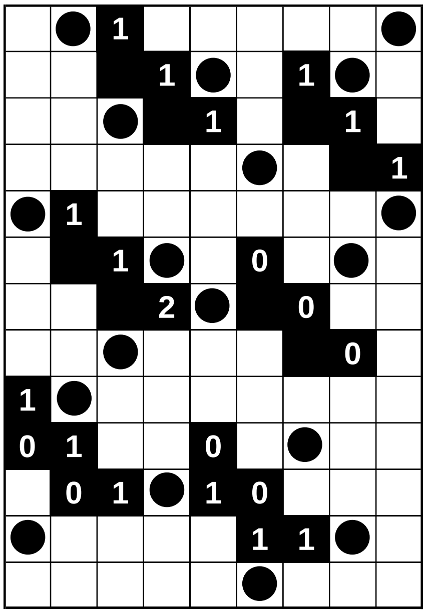


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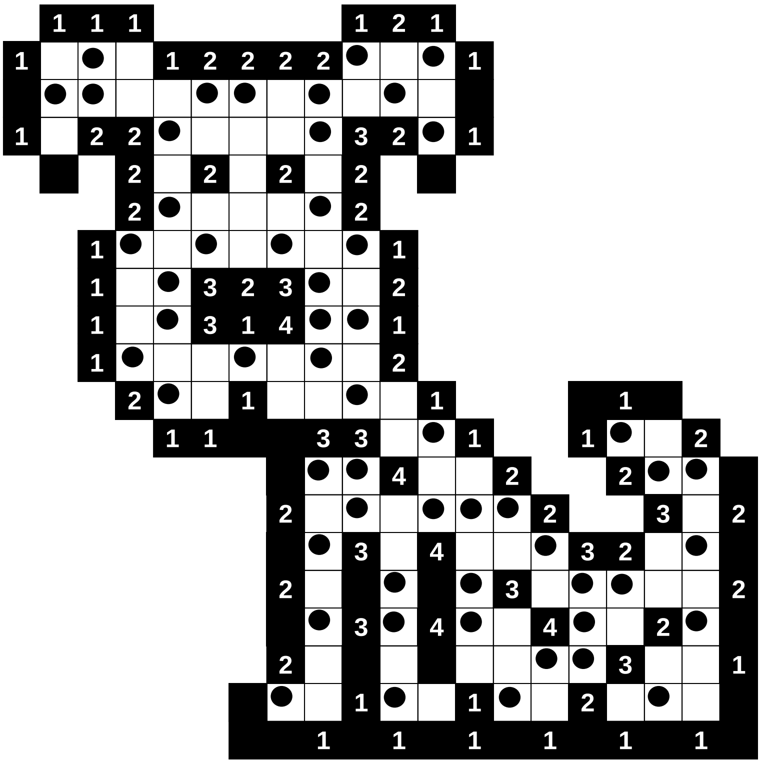

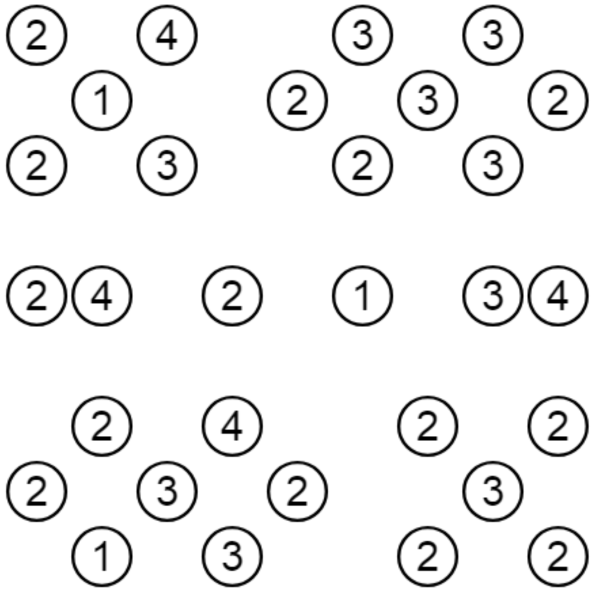

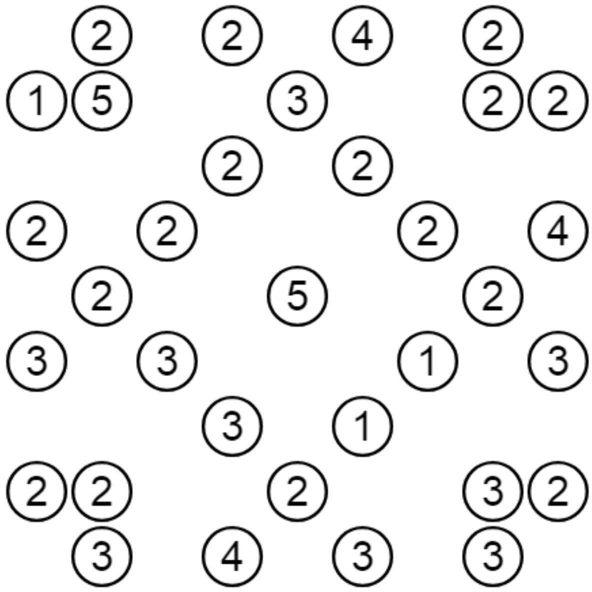

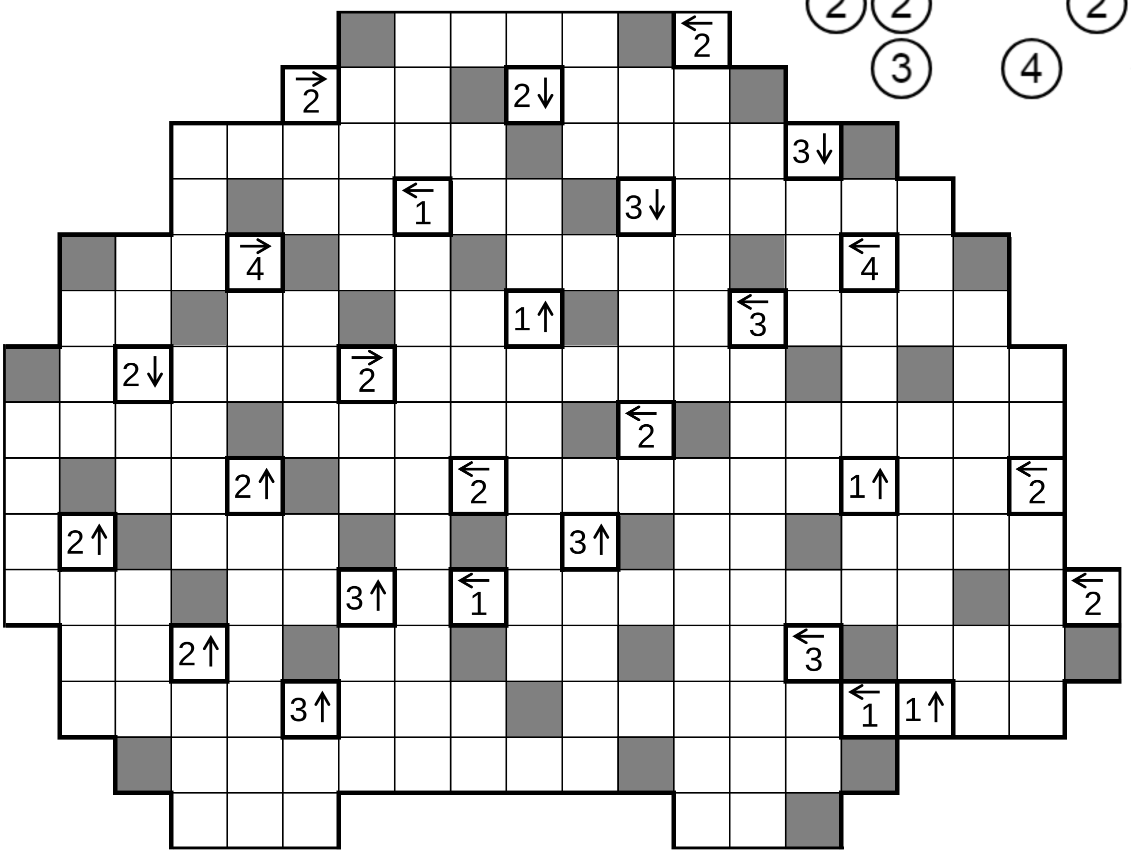

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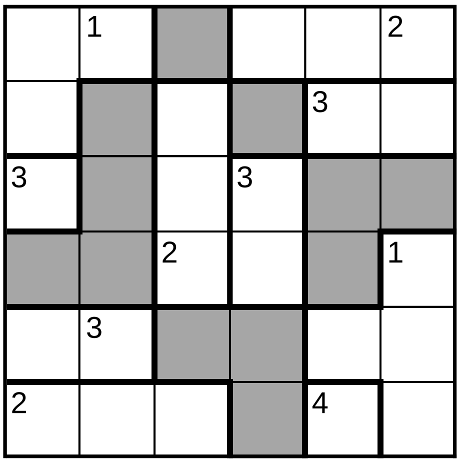

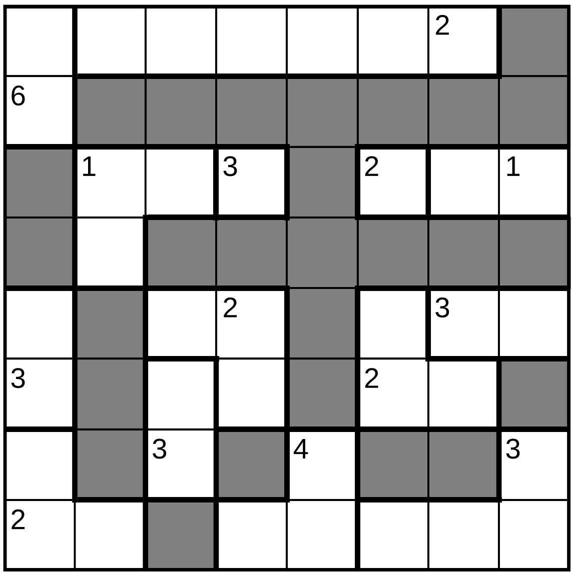

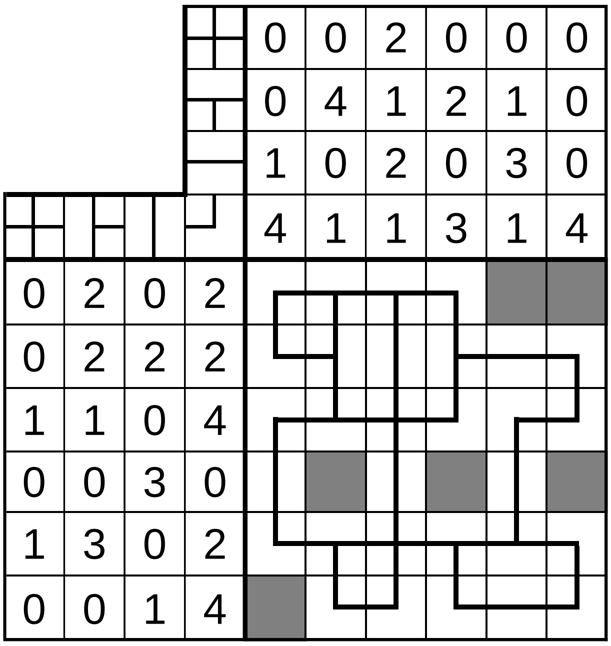

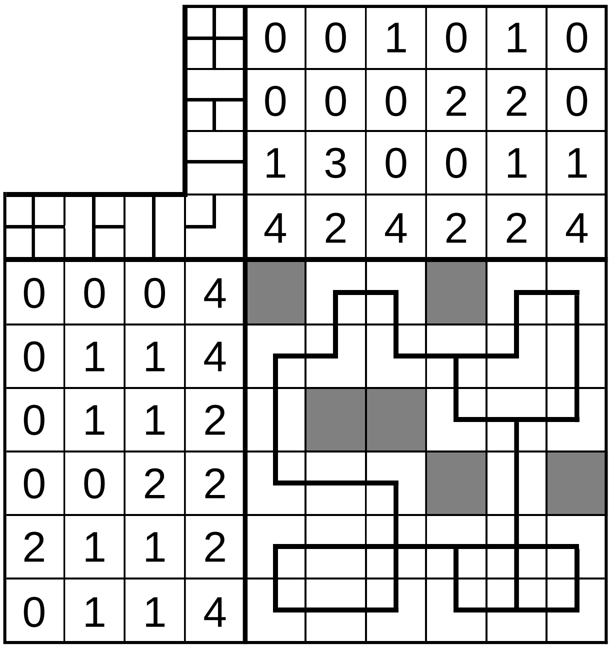

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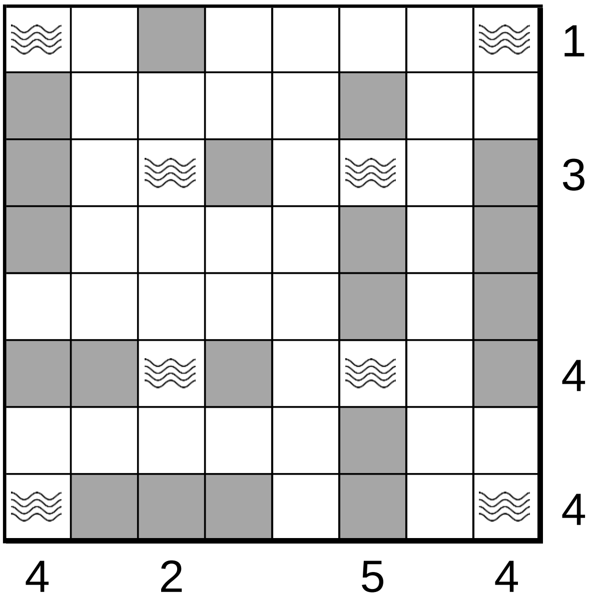


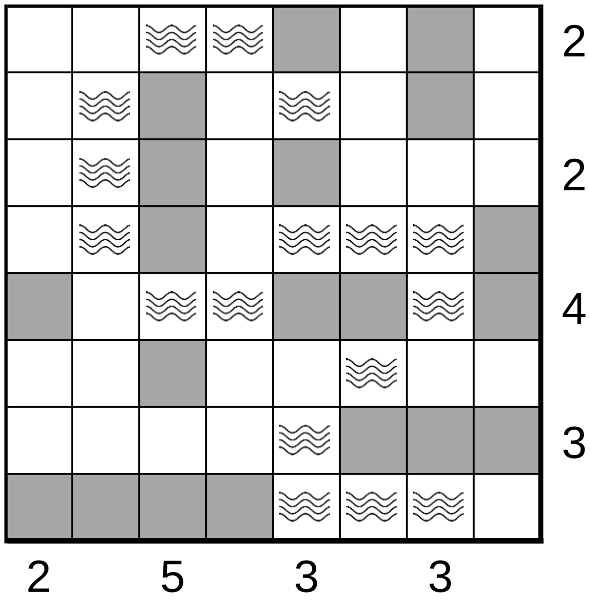


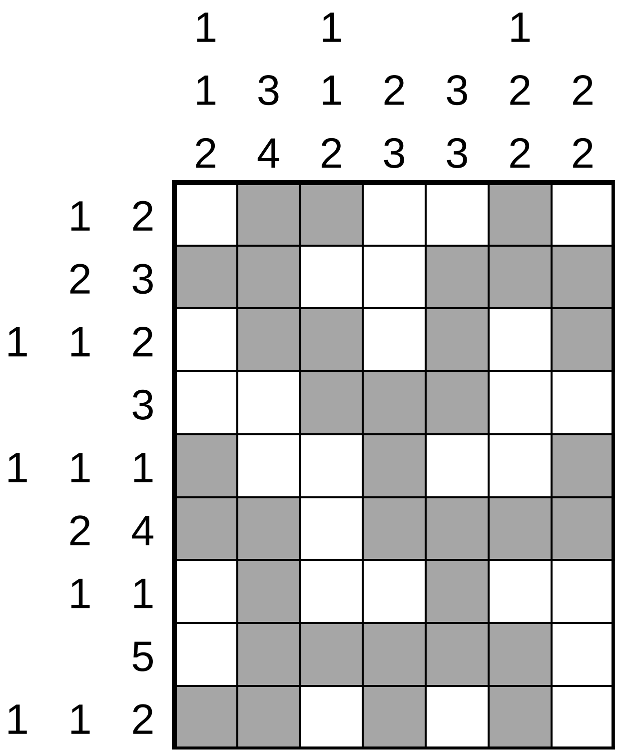


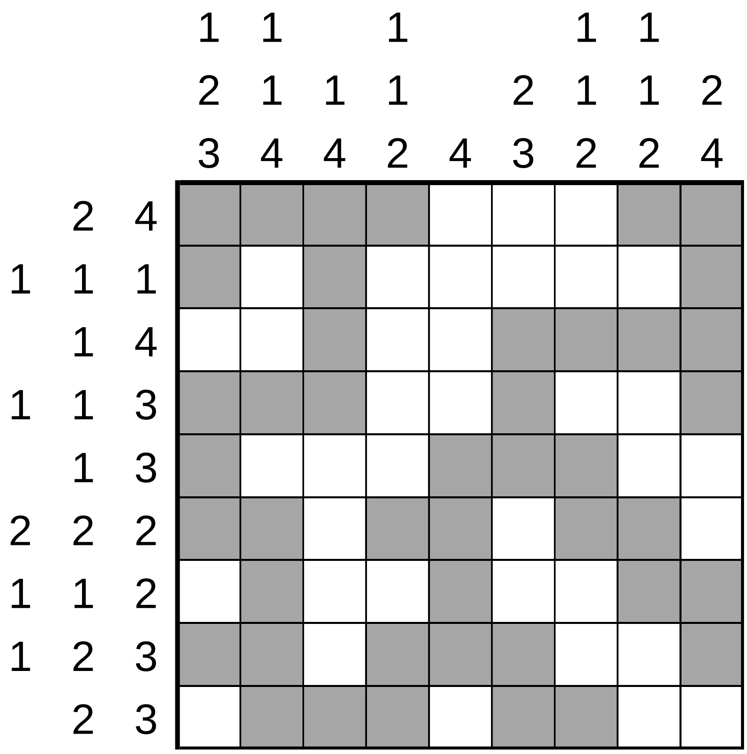

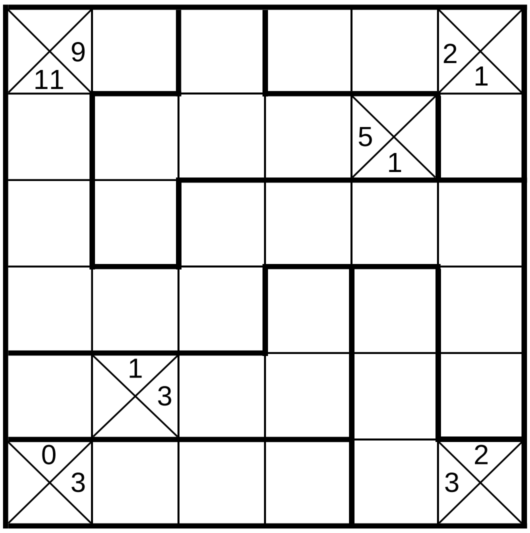
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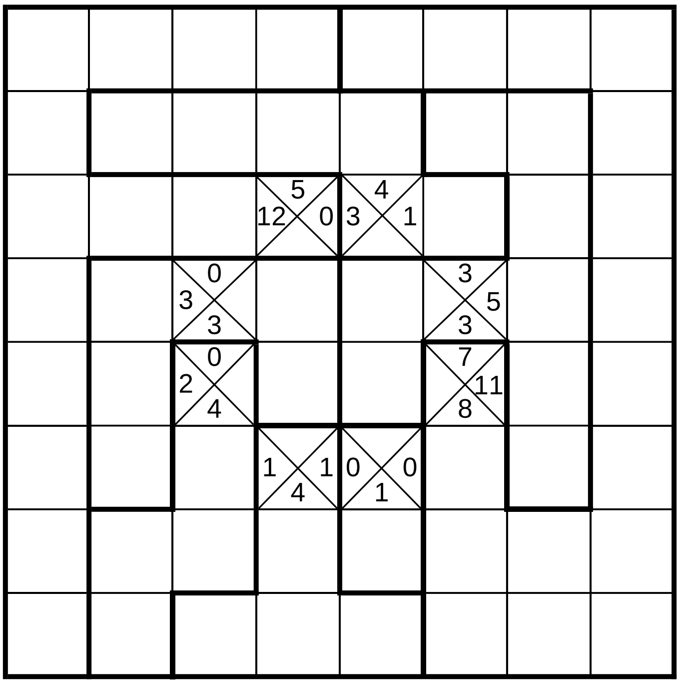
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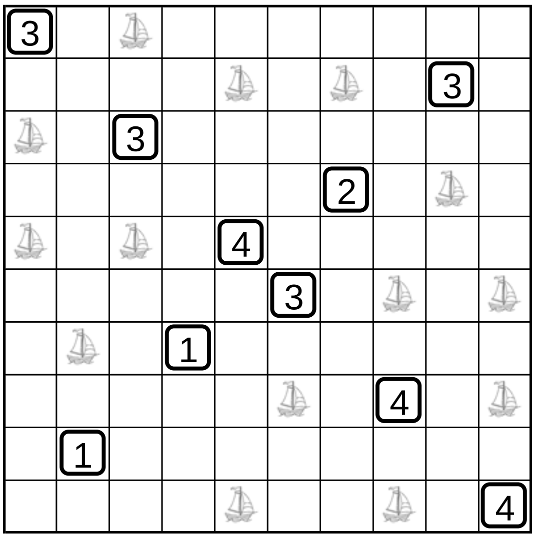
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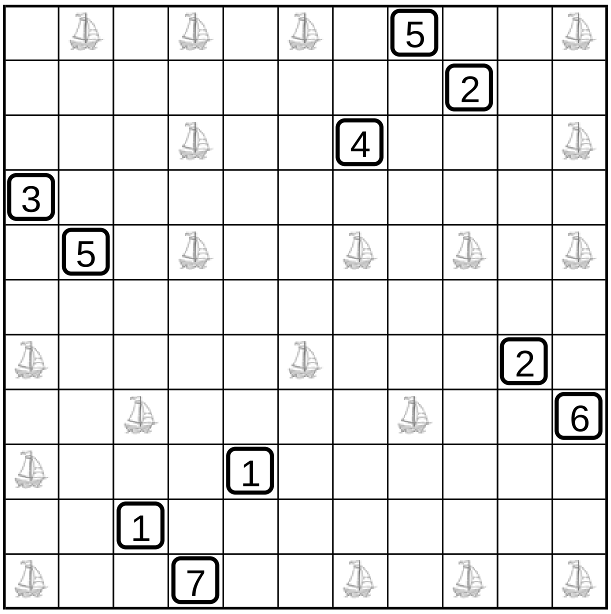
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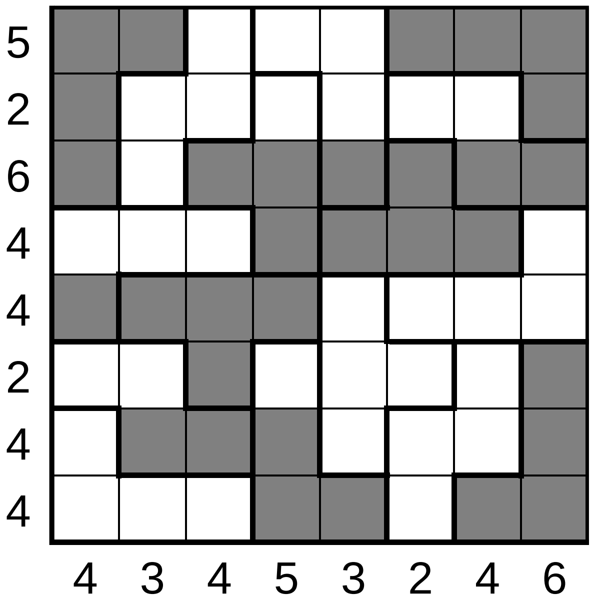
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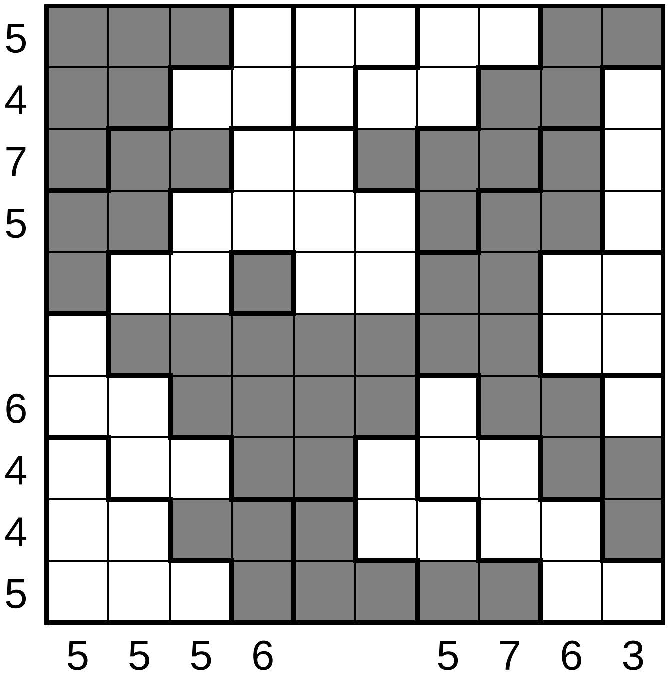
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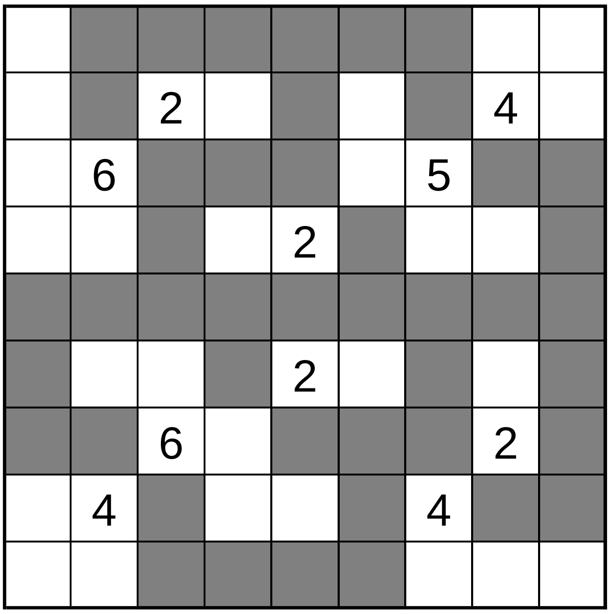
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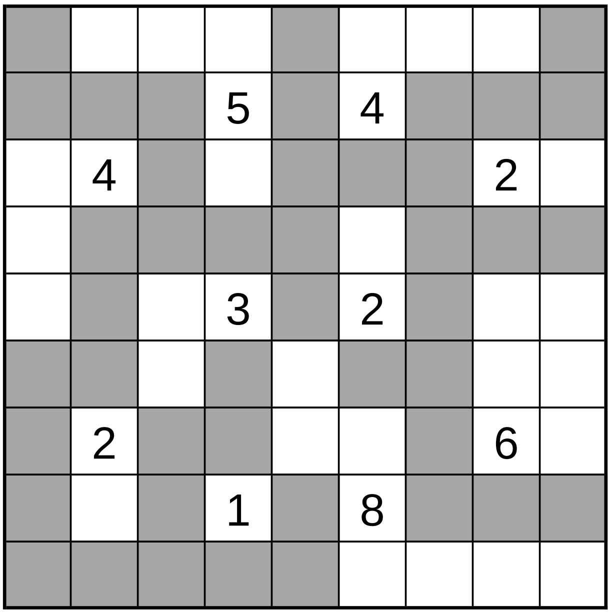
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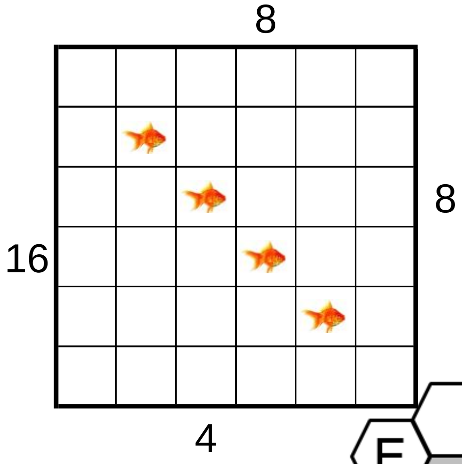
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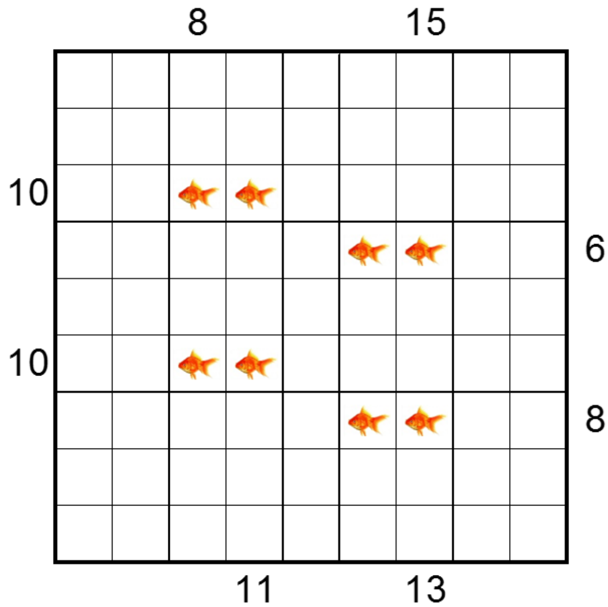
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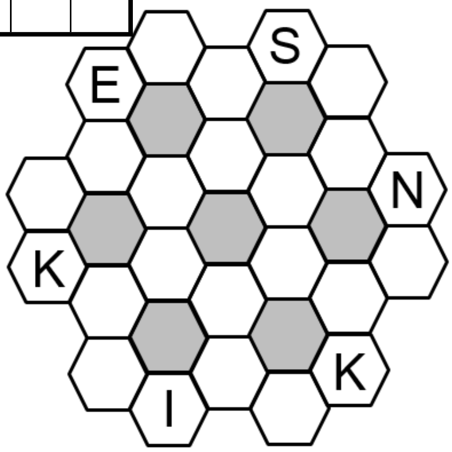
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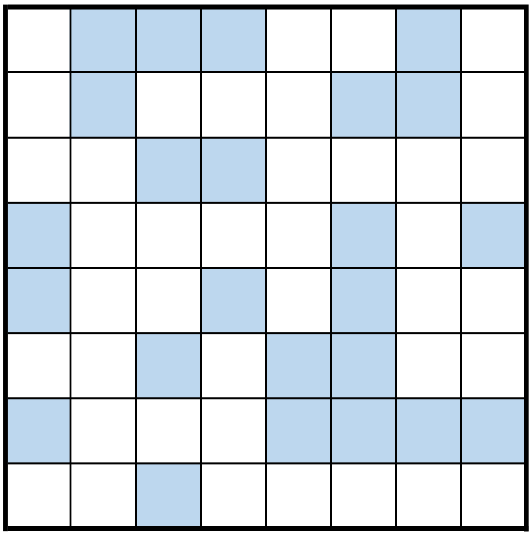

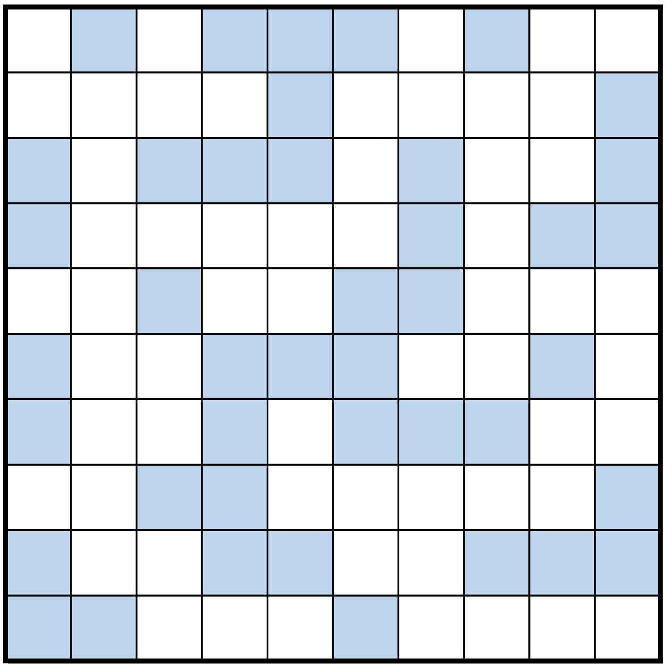

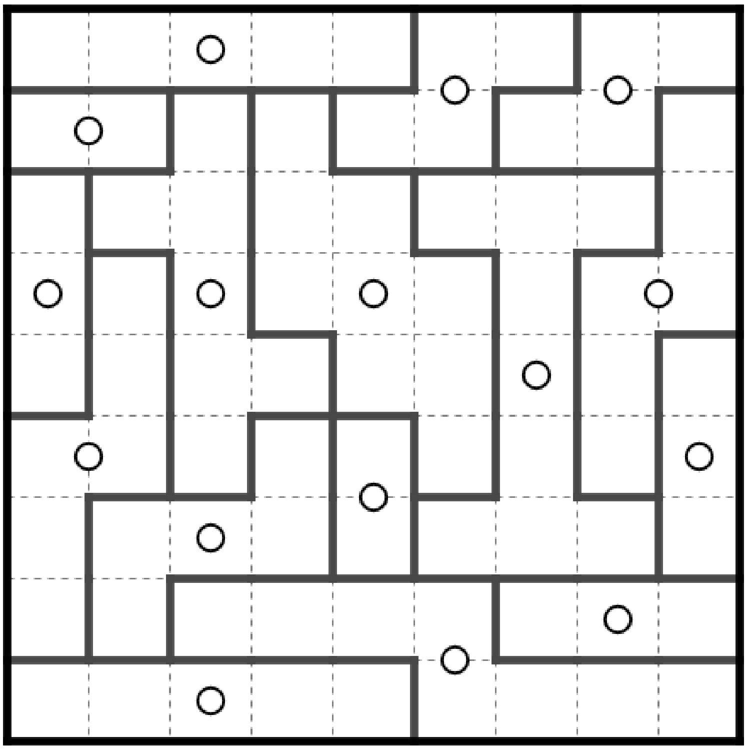

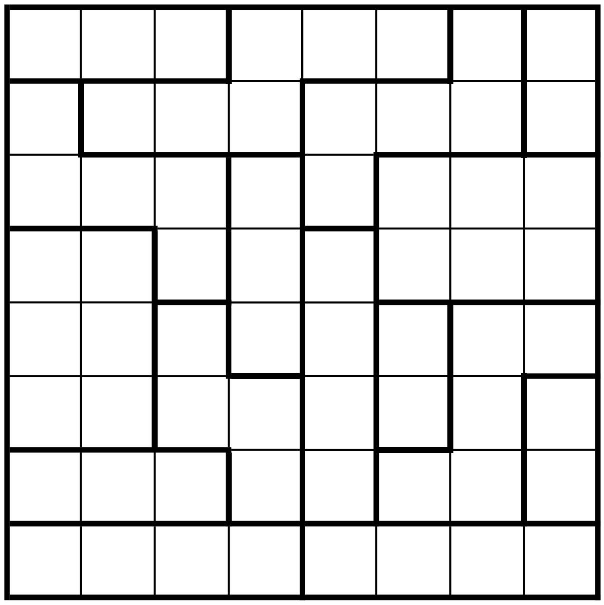

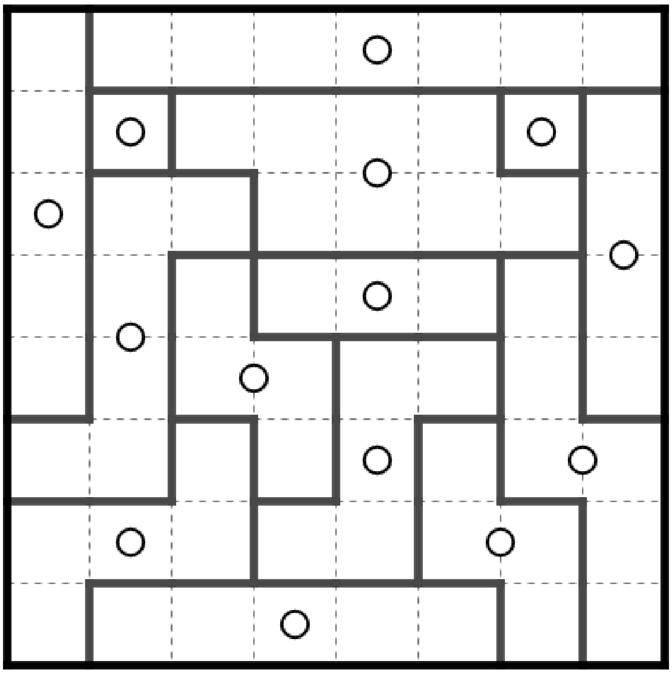

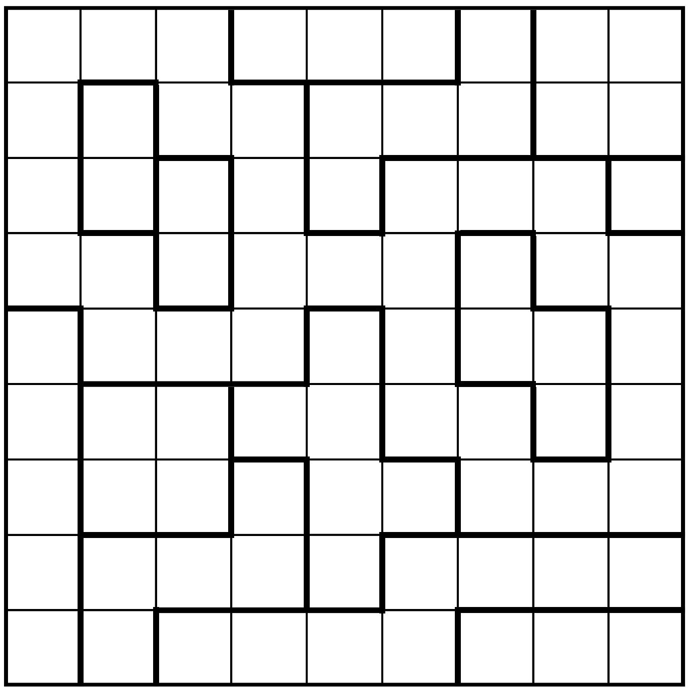

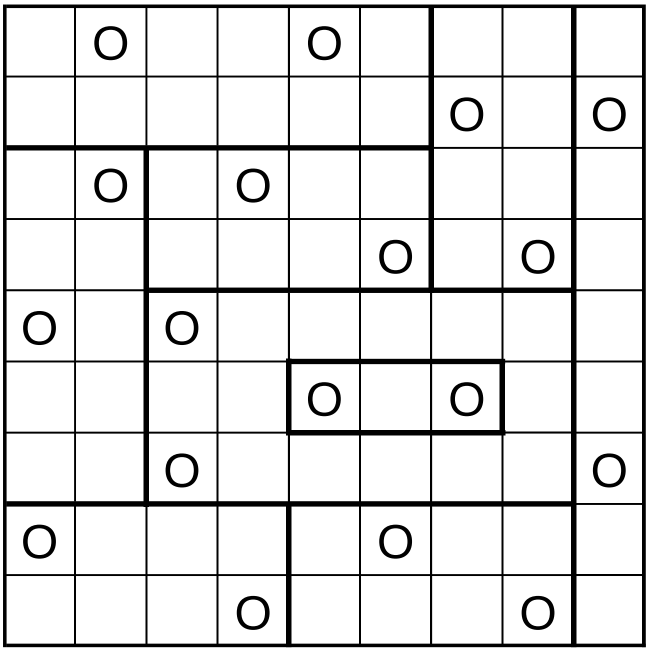

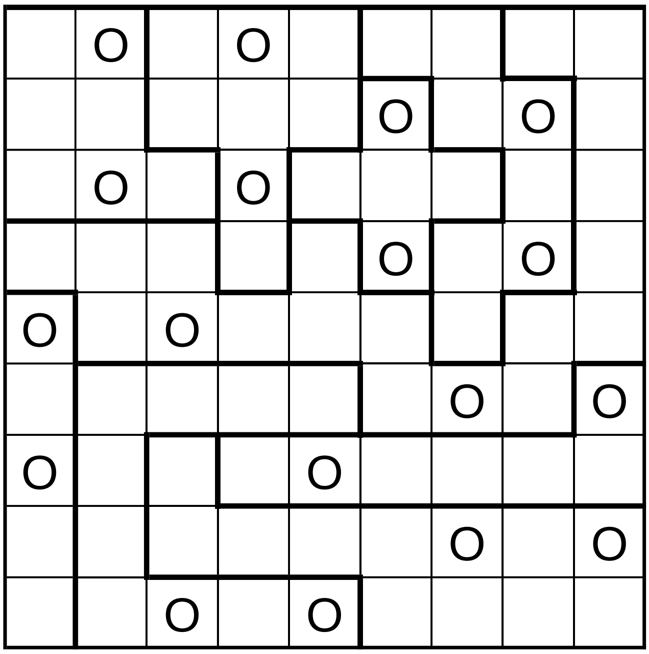

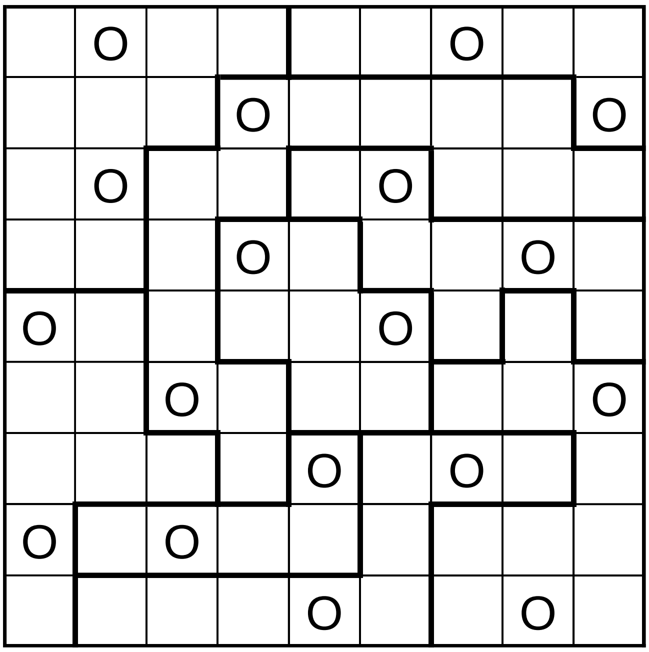

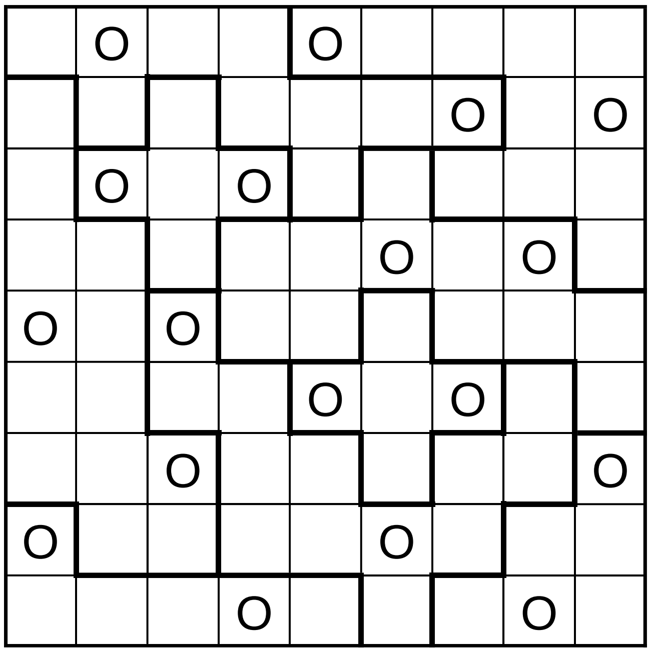

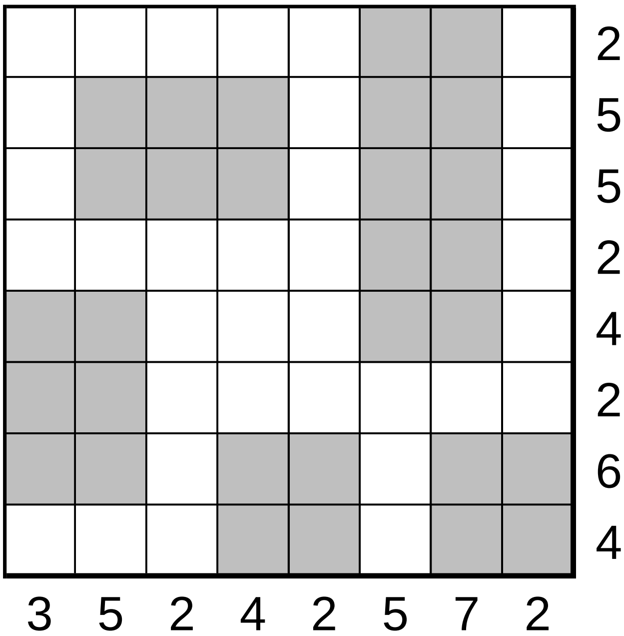
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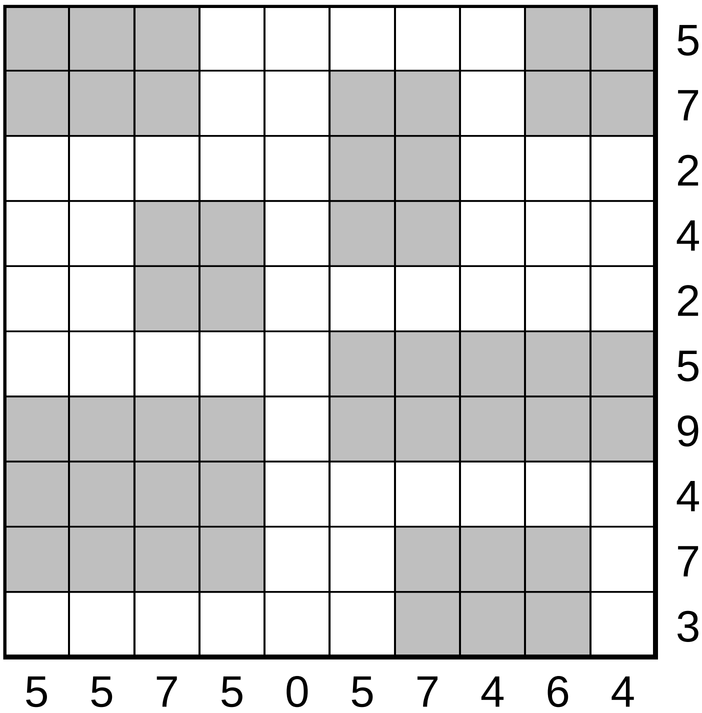
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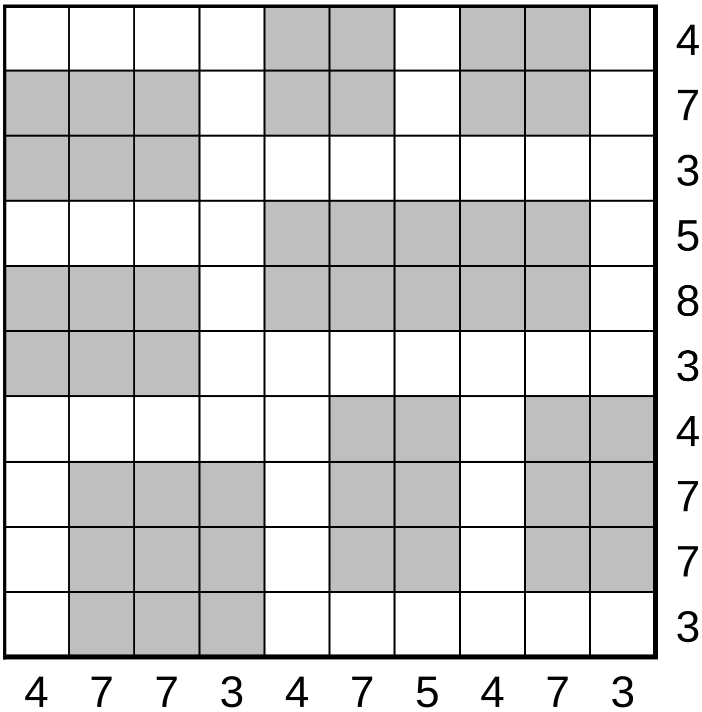
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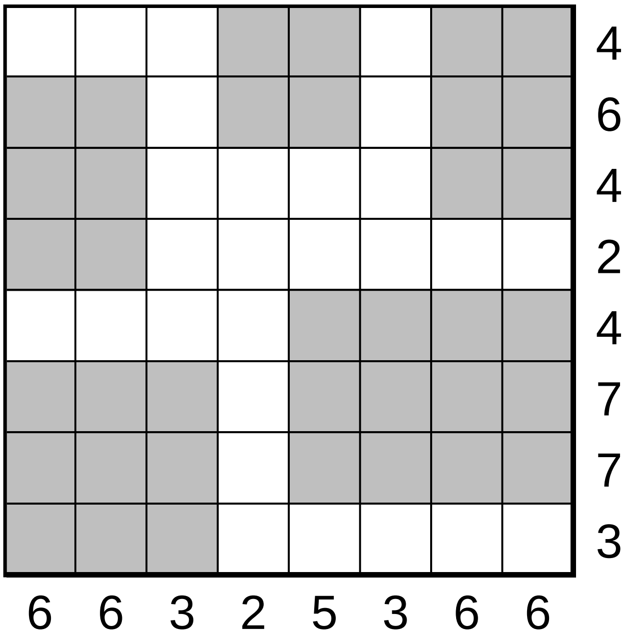
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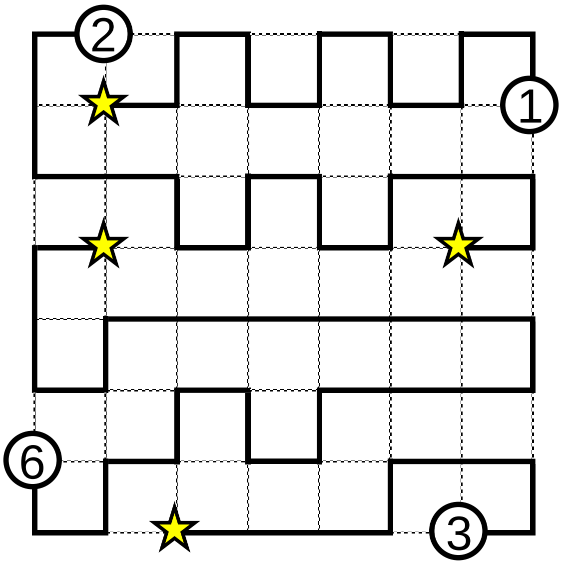

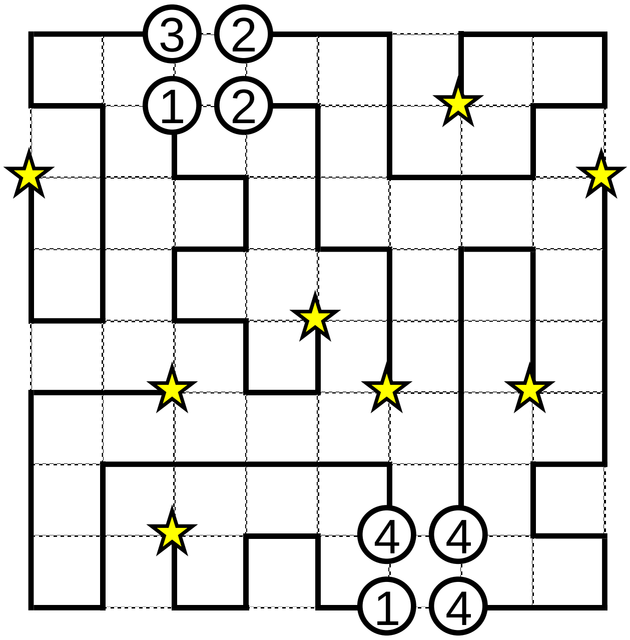

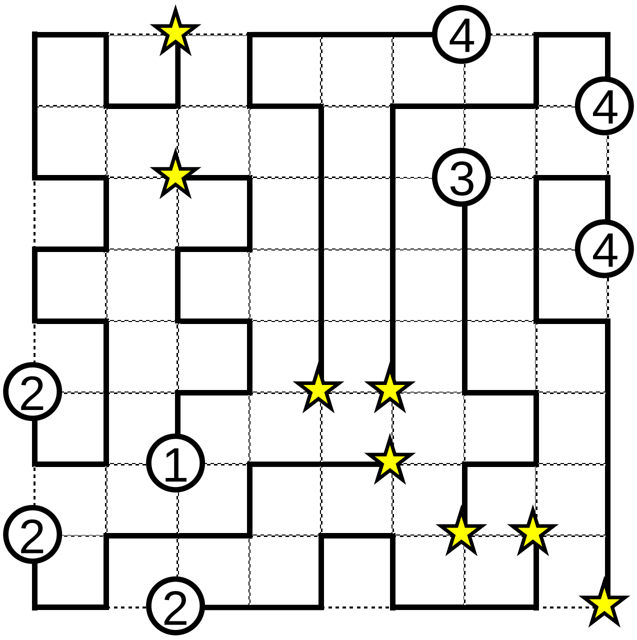

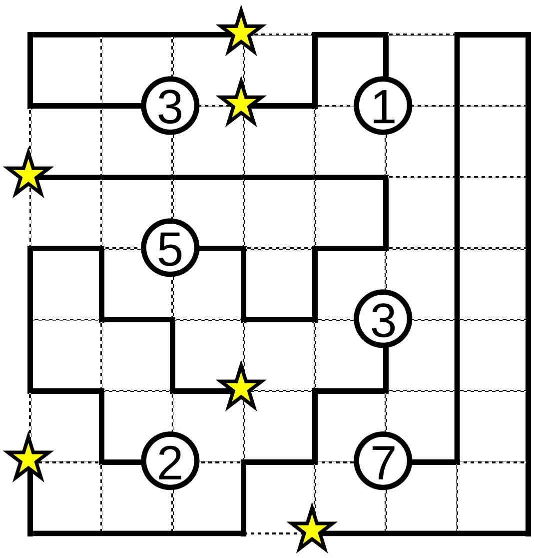

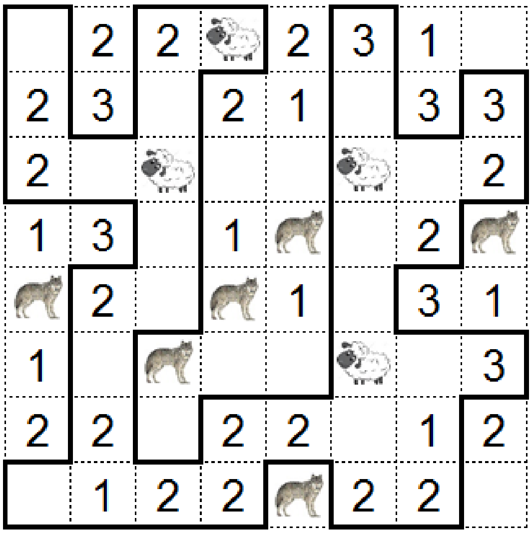

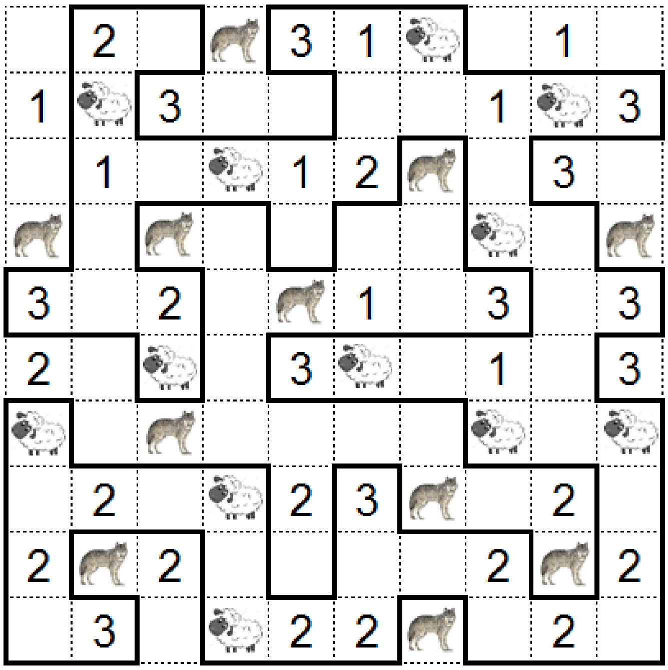

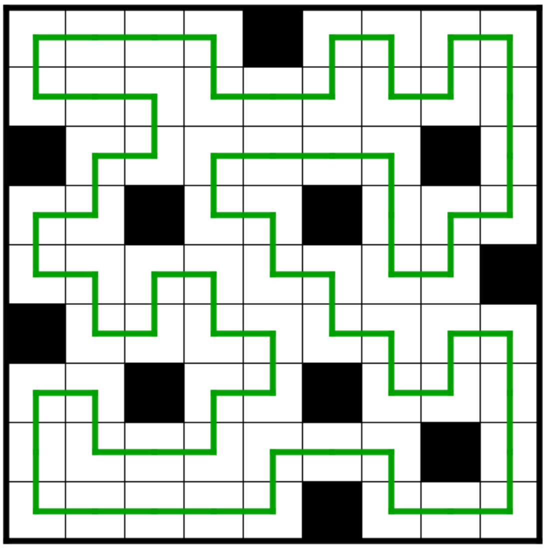

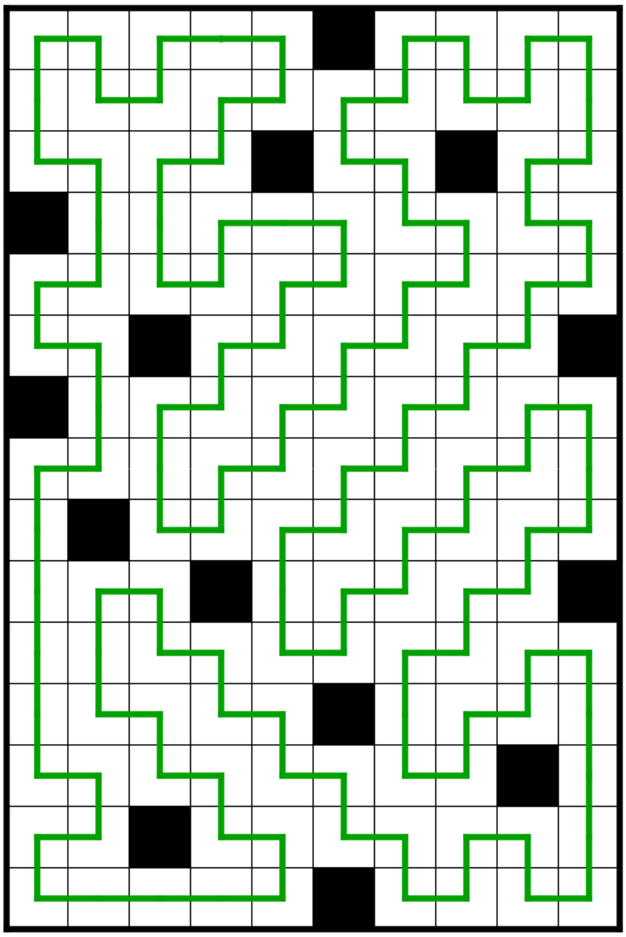

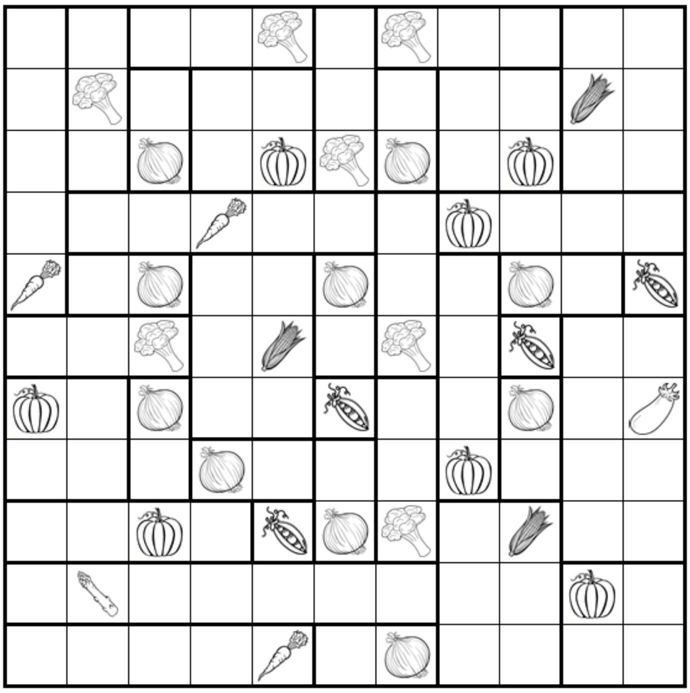

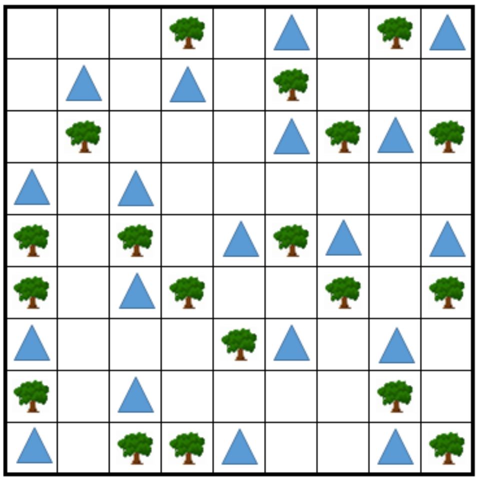

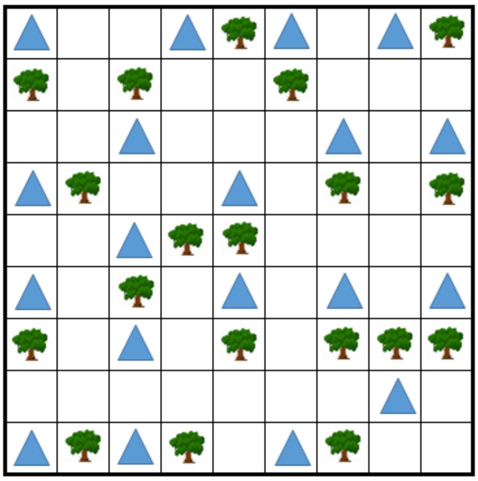

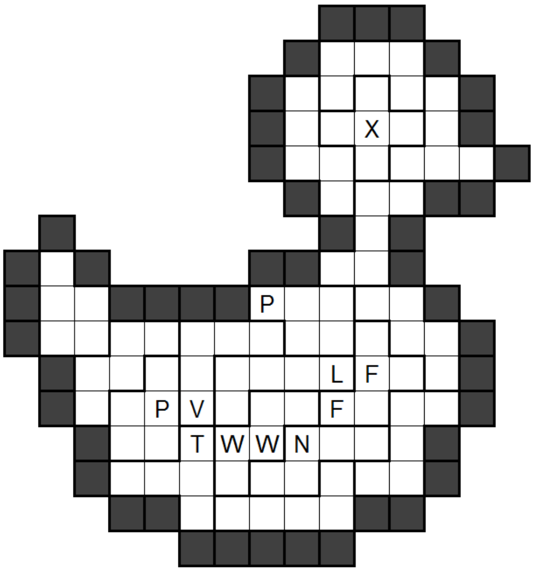
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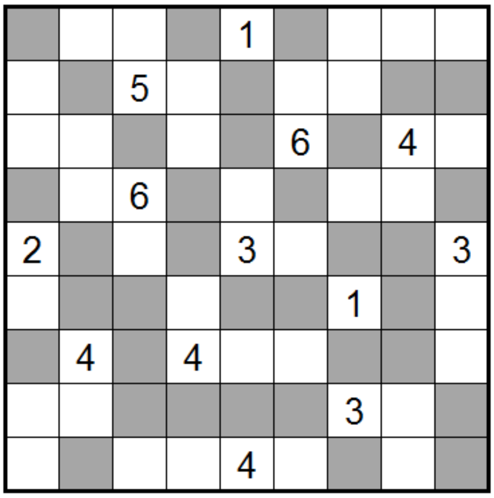
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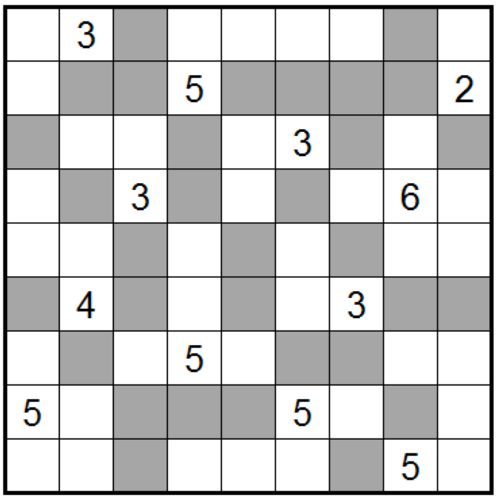
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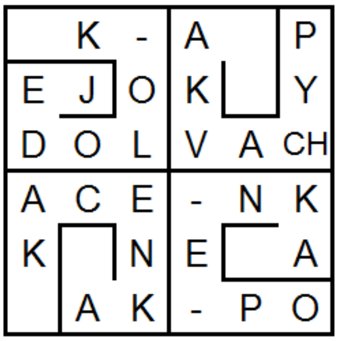
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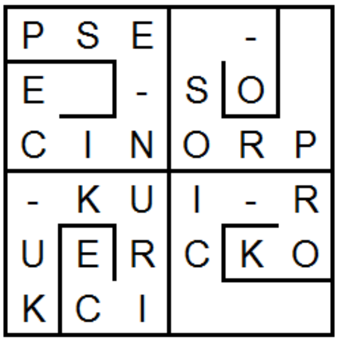
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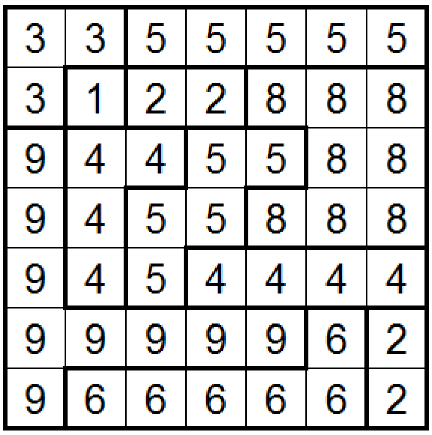
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| 7 | 7 | 6 | 6 | 6 | 6 | 8 | 2 | 7 | 7 | 7 |
| 7 | 1 | 3 | 3 | 3 | 6 | 8 | 2 | 7 | 1 | 10 |
| 7 | 5 | 5 | 5 | 1 | 6 | 1 | 7 | 7 | 3 | 10 |
| 7 | 2 | 2 | 5 | 5 | 3 | 4 | 4 | 3 | 3 | 10 |
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| 8 | 8 | 8 | 10 | 10 | 10 | 5 | 5 | 7 | 9 | 9 |
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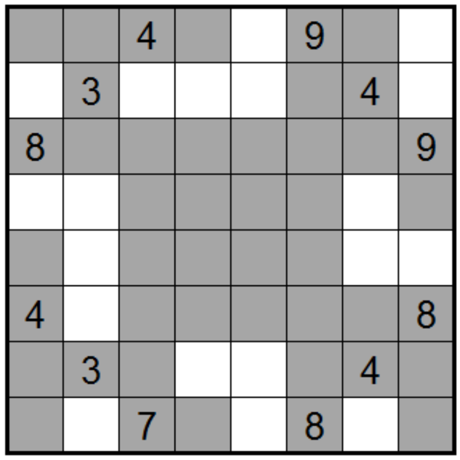

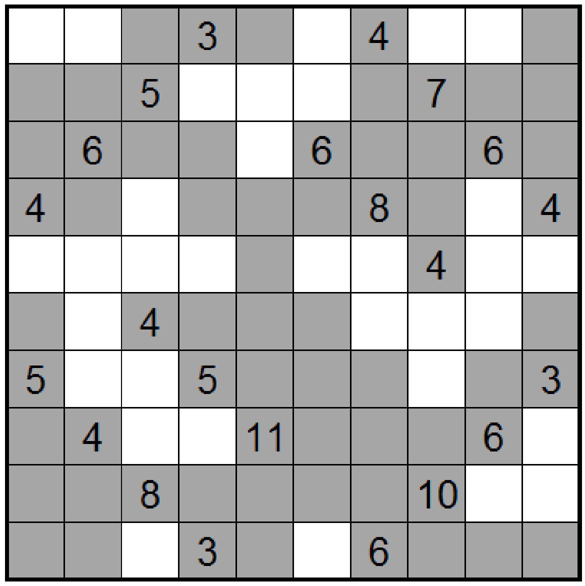

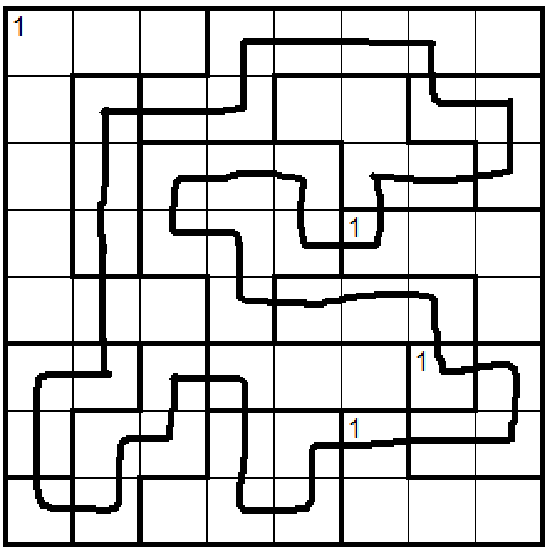

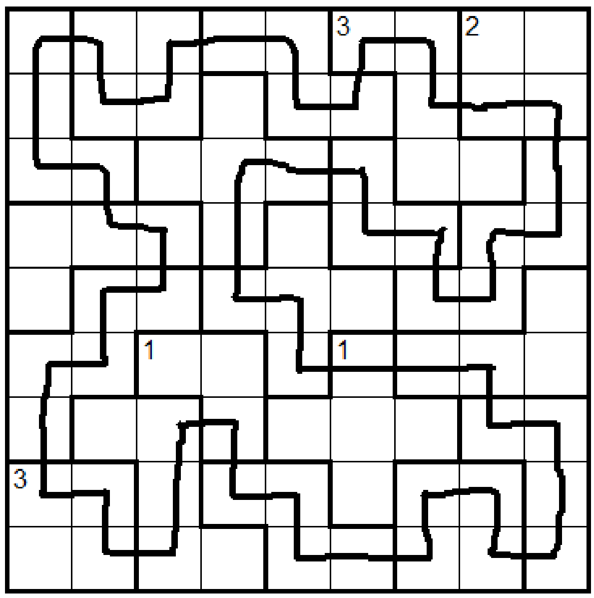

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| 3 | 2 | 4 | 7 ○○○ | 1 | | | |
| 4 ○○ | | 4 ○ | | 3 | 4 | 2 | 1 |
| 1 | | | 4 | 2 | 9 ○○○ | 3 | 4 ○○ |
| | 3 | 2 | 1 | 3 ○○ | | 4 | |
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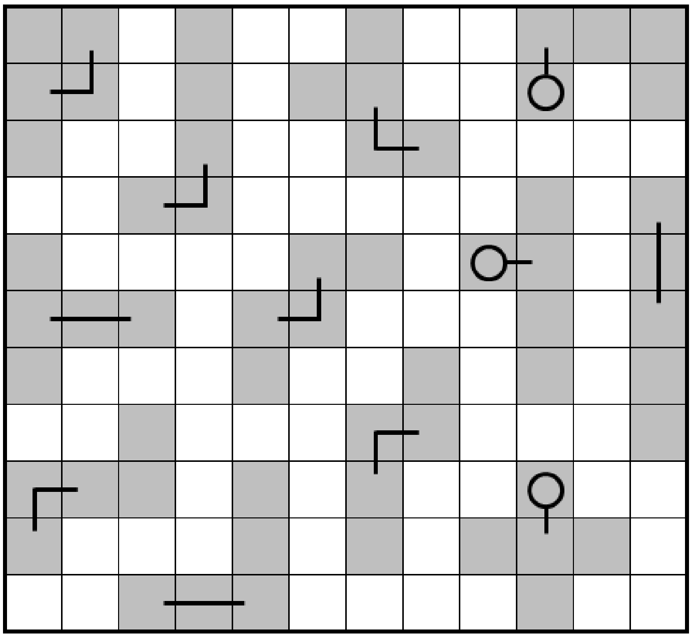

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| | 41 | 6 | 10 | 31 | 5 | 7 | 5 | 21 |
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| 6 2 11 | 6 | ■ | ■ | 2 | ■ | 3 | 8 | ■ |
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| 16 25 | 2 | 6 | 8 | ■ | 5 | 7 | 4 | 9 |

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| S | O | N | S | N | O | O | N | O | O |
| S | S | S | O | O | N | S | O | N | O |
| O | S | S | S | S | O | S | S | S | O |
| O | O | N | S | O | N | O | O | S | O |
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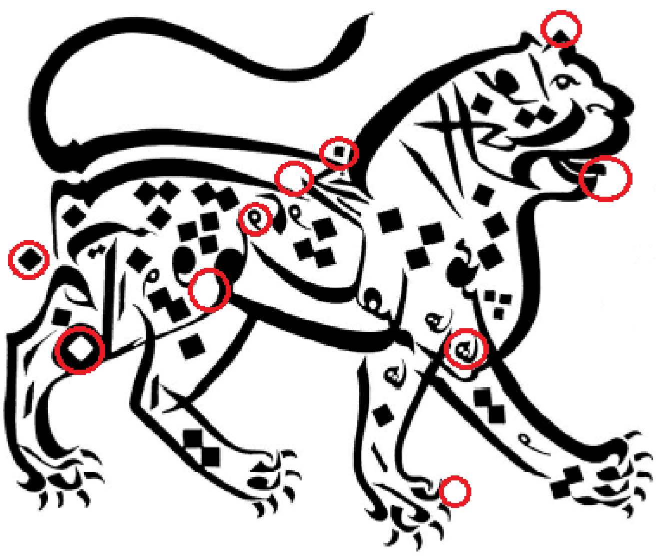

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5 7 6 3 1 9 2
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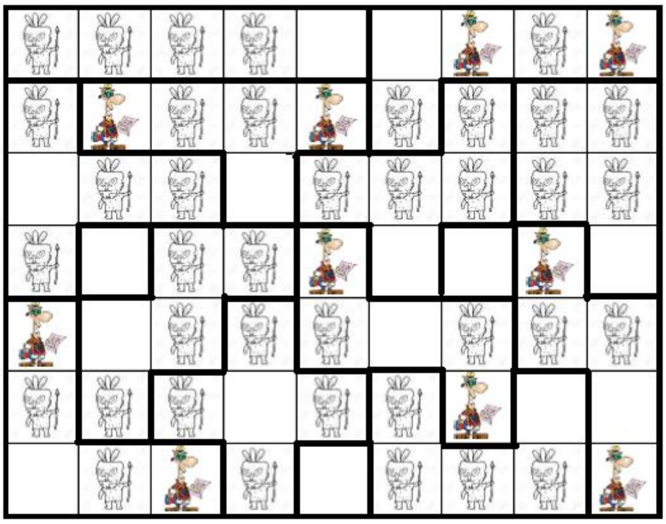

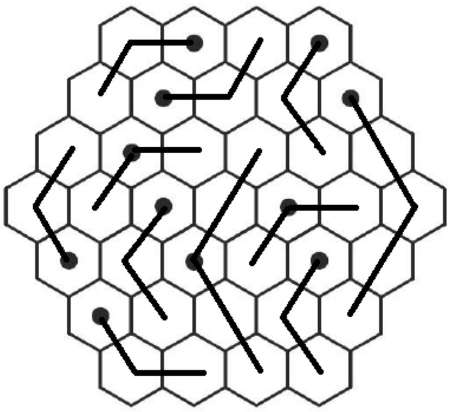

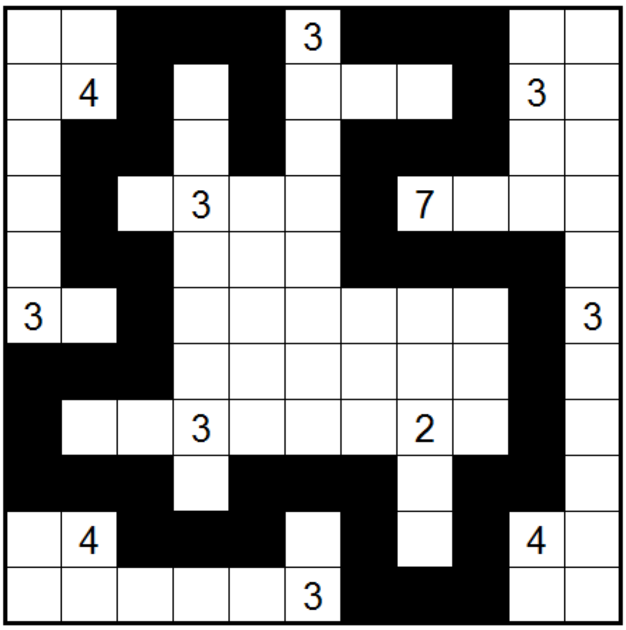

BUMERANGY A HAD MAJÍ VÍCE ŘEŠENÍ