



12-16 February 2021

This year the contest is held online. Puzzles will be available at the special website and answers will be accepted at the same page.

The number of points mentioned in a puzzle are given if the puzzle is solved fully and correctly. Partial solutions are not scored.

The puzzles 1-5 are aimed for all solvers, the puzzles 6-7 for solvers older than 8 years and the puzzle 8 only for solvers older than 10 years.

At the website http://www.puzzleduel.club/puzzleset/40645s1kjytr5kt?lang=en you can find a set of training puzzles which are similar to the puzzles of the contest.

### 1. Maze with coins

Young wizards are collecting coins in a magical maze. Which number of coins can reach each of them?





### 2. In order

A secret agent must visit cashes in the right order. To avoid being suspicious he doesn't want to visit the same place more than once. Help the agent to find a route which goes through all digits in order. The route cannot visit the same place (including intersections) twice.







### 3. Paint by Max

Paint some cells of the grid. The numbers on the top and at the left show the maximum length of block of painted cells in the corresponding row or column. Numbers at the right and in the bottom show the maximum length of block of white cells of light color. A row or a column can contain a few blocks of painted cells.



#### 4. Hexa paint

Paint as much cells as possible following the next rule: a digit in a cell should show the number of painted cells which touch the cell with the digit including the cell itself.



#### 5. Underpass

Paint some cells so that the remaining cells form a pass from the entrance to the exit. The pass should have one cell width, cannot have bifurcation and cannot touch itself even in a point. The numbers outside show the lengths of the painted blocks in the corresponding row or column from left to right or from top to bottom. Between two painted blocks should be at least one white cell.



# 6. Star battle

Fill some cells with stars so that two stars appear in every row, column, and bold-outlined area. Cells with stars cannot touch each other, not even diagonally.



### 7. Akari

Place light bulbs in some white cells so that each white cell is illuminated. Light bulbs illuminate every white cell in all four orthogonal directions until blocked by a black cell. No light bulb can be illuminated by another light bulb. Clue numbers correspond to the number of light bulbs in the four orthogonally adjacent cells.







## 8. Perfect Square Sudoku

Fill in the grid with digits from 1 to N putting one digit per a cell. Each row, column and outlined area should contain every digit exactly once. Dots show all two-digit perfect square numbers reading from top to bottom or from left to right. Perfect squares numbers are 16, 25, 36, 49, 64, 81.





6	5	3	2	4	1
2	1	4	6	3	5
3	2 (	5	4	1	6
4	6	1	3	5	2
1	4	2 (	5	6	3
5	3 (	6	1	2	4