3^2 ANNIVERSARY

formats

SQUARED CONTEST

Instruction Booklet

All puzzles in this contest are "squared", meaning there are four of each kind, forming a 2x2 square. Clues in the grey cells are common for both adjacent grids. Finding their complete content is a part of solution.

Points are given for every single puzzle solved (but only if it is a part of entire solution of the "squared" puzzle). If the entire "squared" puzzle is solved (all 4 answer keys are correct) the participant is awarded with the additional bonus.

The answer key will be either 2 rows or 2 columns. The empty cells should be marked by "-"; battleships, tents, coral and snake parts - by "X", numbers and letters should be entered as they are.

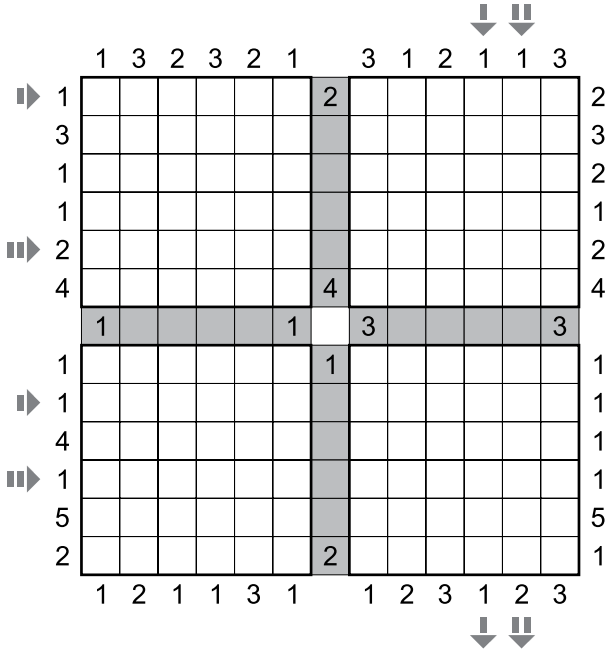
Duration of the contest is 120 minutes + 10 minutes extra time. There will be a penalty for the submission during extra time: 0.2 points per second (12 points per minute).

1. (First Seen Coral)^2	50 points (4 x 11 + Bonus: 6)
2. (Battleships)^2	70 points (4 x 15 + Bonus: 10)
3. (Tents)^2	80 points (4 x 18 + Bonus: 8)
4. (Easy as ABC)^2	105 points (4 x 24 + Bonus: 9)
5. (Outside Sum Sudoku)^2	115 points (4 x 26 + Bonus: 11)
6. (Dotted Snake)^2	125 points (4 x 28 + Bonus: 13)
7. (First Seen Even-Odd Sudoku)^2	135 points (4 x 30 + Bonus: 15)
8. (Skyscrapers)^2	155 points (4 x 34 + Bonus: 19)
9. (First Seen Japanese Sums)^2	165 points (4 x 36 + Bonus: 21)

My sincere thanks go to:
Andrey Bogdanov for testing the puzzles
Deb Mohanty and LMI for hosting the contest

1. (First Seen Coral)² - 50 points (4 x 11 + Bonus: 6)

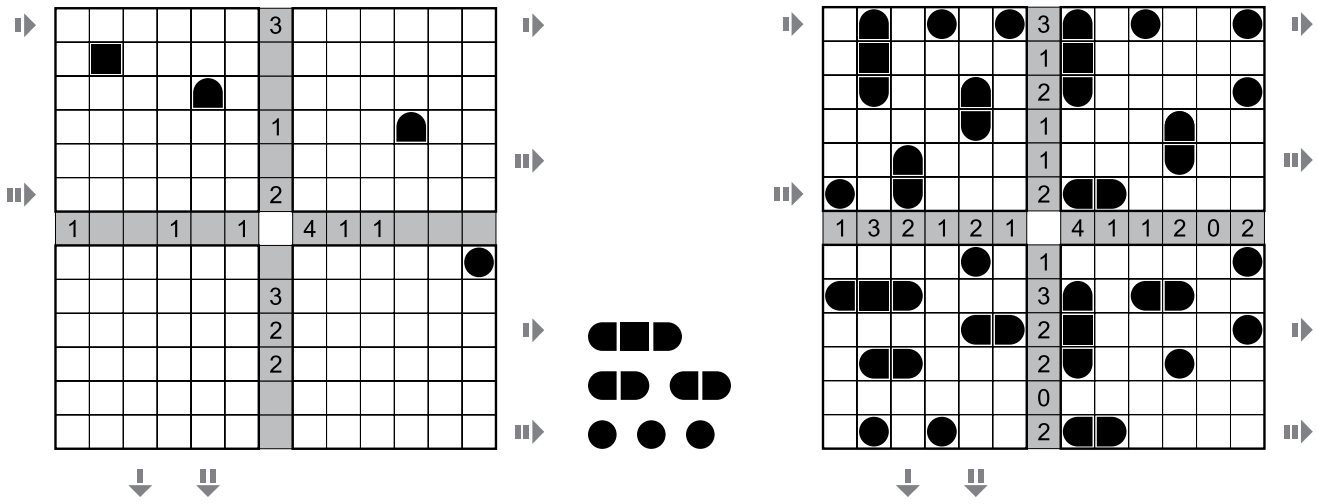
Select a connected set of squares - the coral - so that it does not touch itself, not even diagonally. Numbers outside the grid indicate the lengths of the first seen consecutive parts of the coral in the given row or column. No 2x2 area may be covered by the coral. The coral can have no island inside itself.



Top Left: --X-XX, XX--X-
Top Right: X----X, --X-XX
Bottom Left: -X----, ----X-
Bottom Right: --X-X-, ----XX

2. (Battleships)² - 70 points (4 x 15 + Bonus: 10)

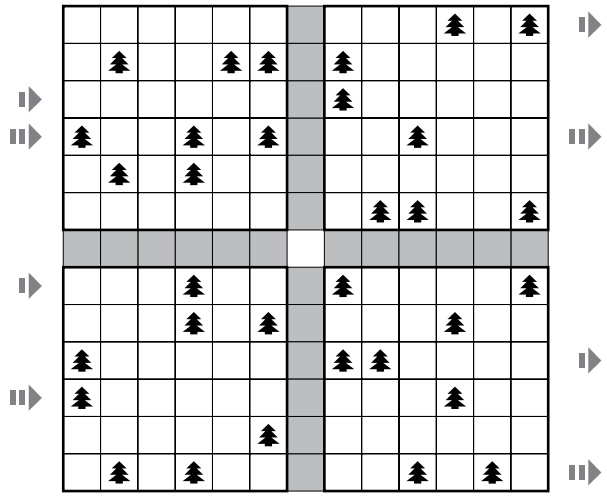
Place the given fleet in the grid. Ships can be rotated, but they cannot touch each other even diagonally. Numbers on the sides show the number of cells occupied by the ships in the corresponding rows and columns. Wavy cells cannot be occupied by the ships. Some parts of the ships may be given.

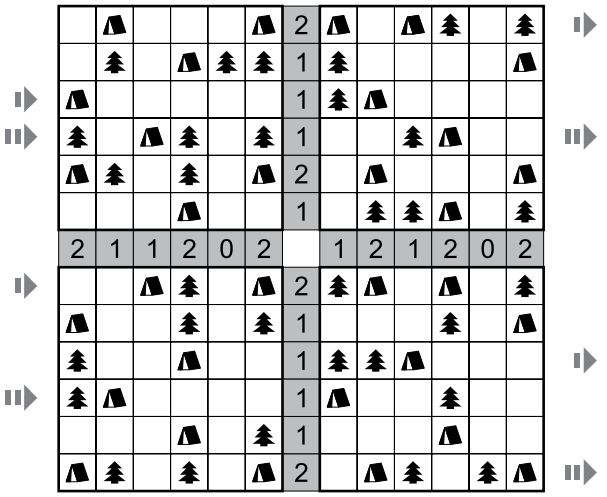


Top Left: -X-X-X, X-X---
Top Right: X-X--X, ---X--
Bottom Left: -X-X--, X-X---
Bottom Right: X----X, XX----

3. (Tents)² - 80 points (4 x 18 + Bonus: 8)

Place the tent next to each tree (in adjacent cell). Cells with the tents cannot touch each other even at a point. Numbers on the sides show the number of cells occupied by the tents in the corresponding rows and columns.

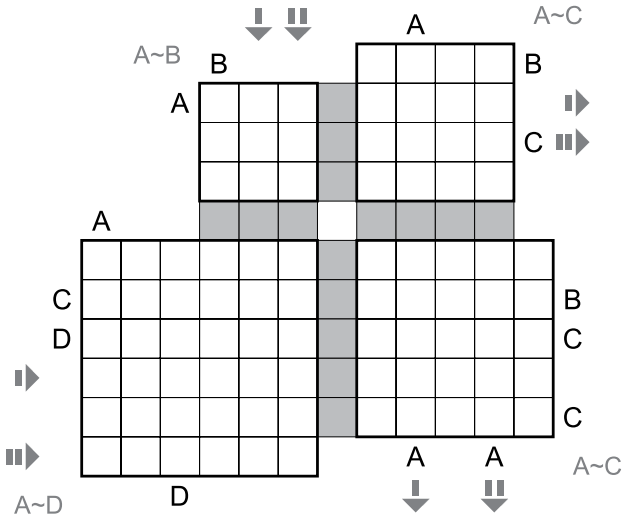


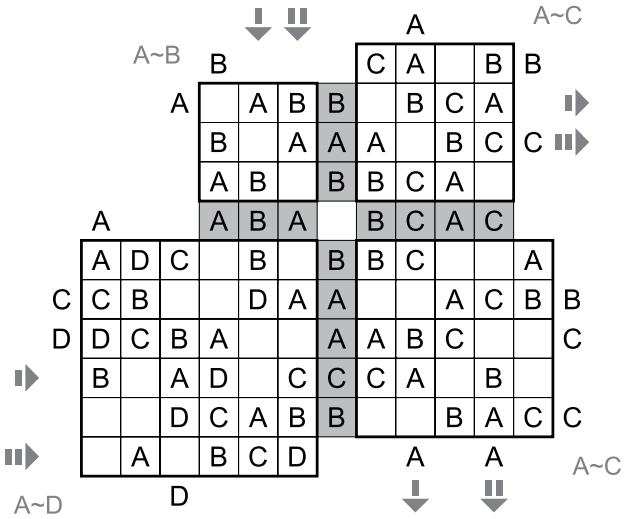


Top Left: X-----, --X---
Top Right: X-X---, ---X--
Bottom Left: --X--X, -X----
Bottom Right: --X---, -X---X

4. (Easy as ABC)² - 105 points (4 x 24 + Bonus: 9)

Fill the grid with the given set of letters, so that each row and column contains each letter exactly once. Letters outside the grid should appear first in corresponding direction.

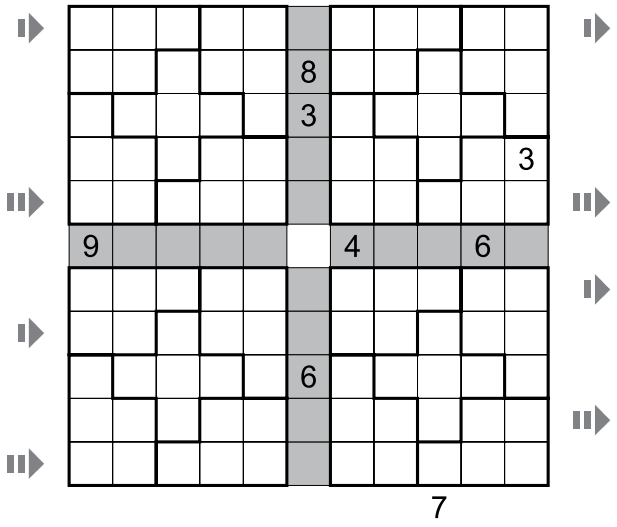


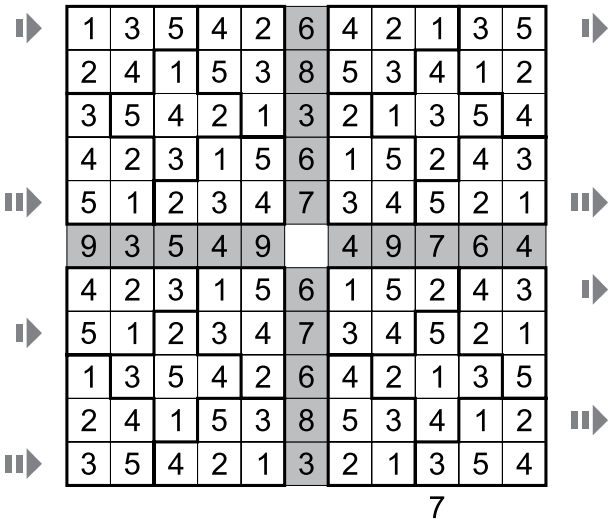


Top Left: A-B, BA-
Top Right: -BCA, A-BC
Bottom Left: B-AD-C, -A-BCD
Bottom Right: C-BA-, -C-BA

5. (Outside Sum Sudoku)² - 115 points (4 x 26 + Bonus: 11)

Fill in the grid with the numbers 1 through 7 (5 in the example). Numbers should appear in each row, column and outlined area exactly once. Numbers outside the grid show the sum of two closest numbers in corresponding row/column.

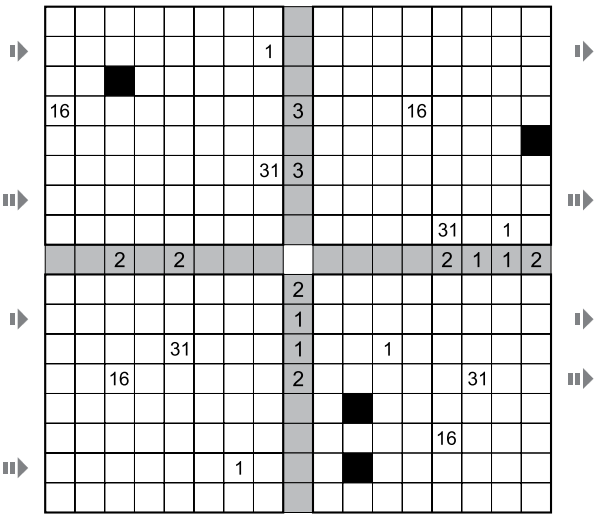


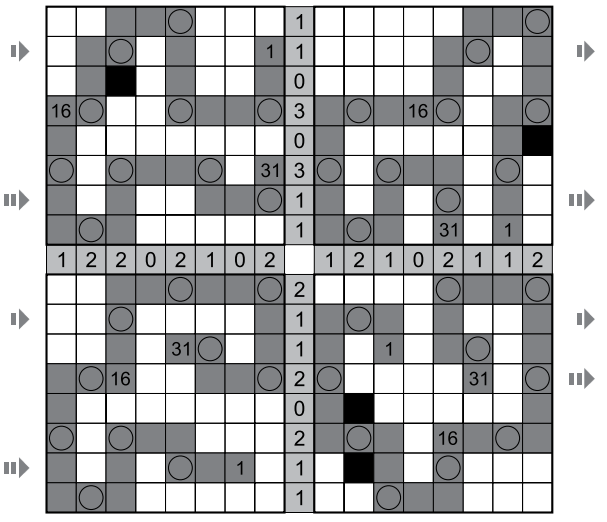


Top Left: 13542, 51234 *Top Right: 42135, 34521*
Bottom Left: 51234, 35421 *Bottom Right: 15243, 53412*

6. (Dotted Snake)² - 125 points (4 x 28 + Bonus: 13)

There is a 45 units long (31 units in the example) snake hiding in the grid. The body of the snake cannot touch itself, not even diagonally. Every 3rd square (3, 6, 9 etc.) of the snake has a dot on it. Numbers outside the grid reveal how many dots of the snake are in the corresponding row or column. The head, middle and tail squares of the snake are given. The black squares are not part of the snake.

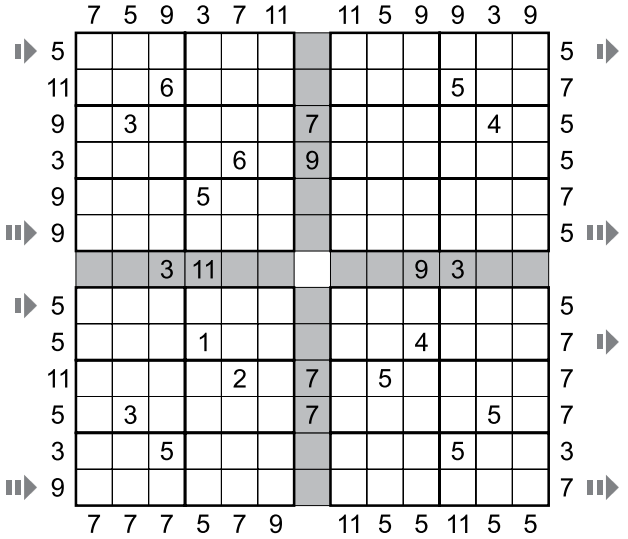


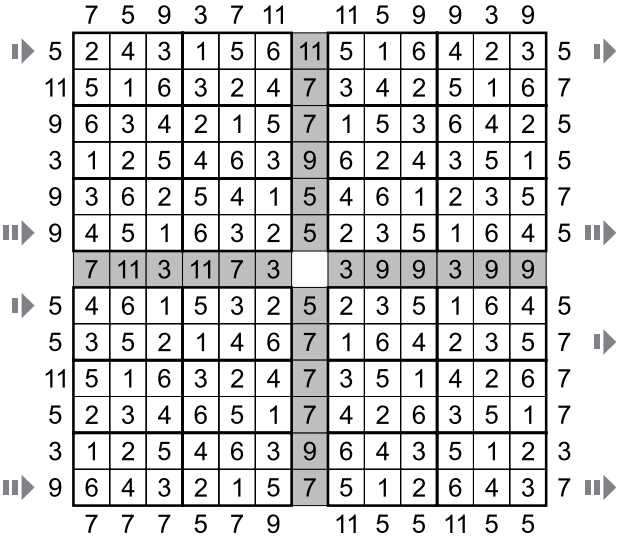


Top Left: -XX-X--X, X-X--XXX *Top Right: ----XX-X, X-X-X-X-*
Bottom Left: --X----X, X-X-XXX- *Bottom Right: XXX-X--X, X----X-X*

7. (First Seen Even-Odd Sudoku)^2 - 135 points (4 x 30 + Bonus: 15)

Fill in the grid with the numbers 1 through 7 (6 in the example). Numbers should appear in each row, column and outlined area exactly once. Numbers outside the grid show the sum of the first seen even and the first seen odd number in corresponding row/column.



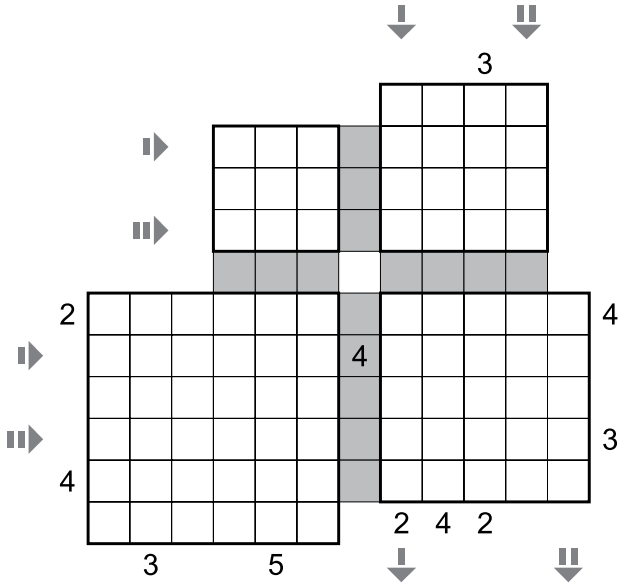


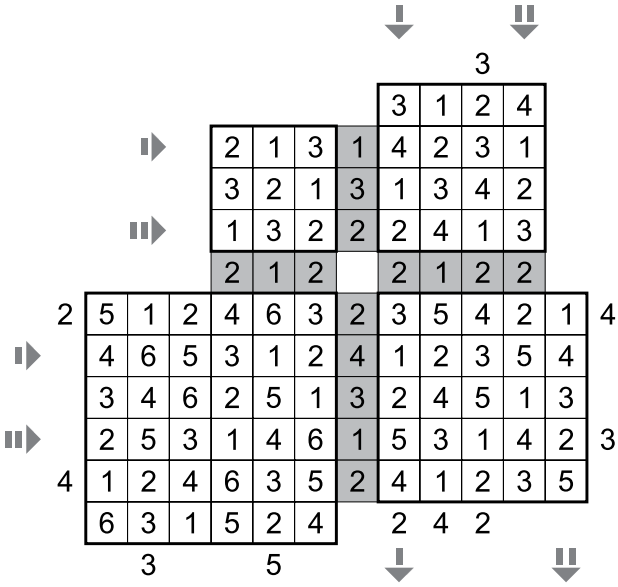
Top Left: 243156, 451632 *Top Right: 516423, 235164*

Bottom Left: 461532, 643215 *Bottom Right: 164235, 512643*

8. (Skyscrapers)^2 - 155 points (4 x 34 + Bonus: 19)

Fill the grid with the numbers from 1 to n (n is the size of the grid). Each number represents the building of that height. Each row and column should contain each number exactly once. Digits outside the grid show the number of buildings visible from their positions (shorter buildings are hidden behind the taller ones).



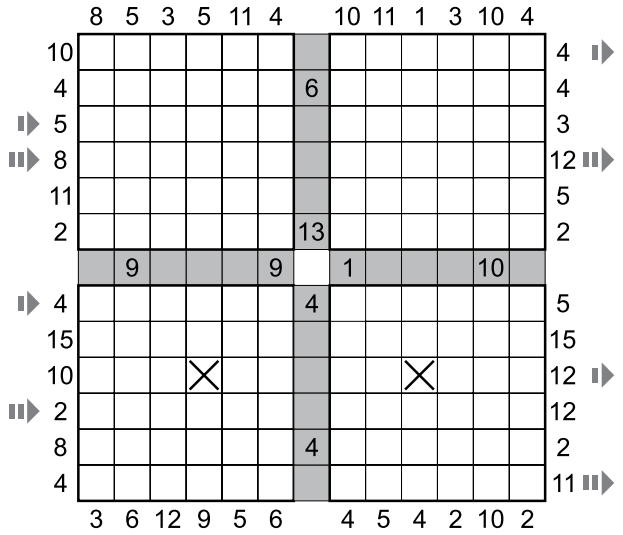


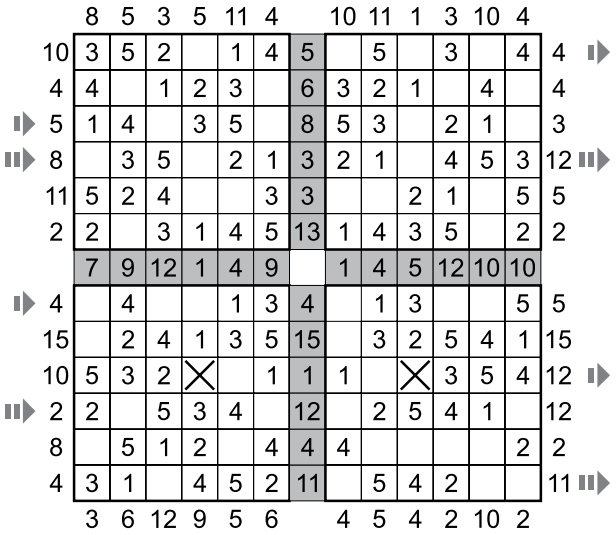
Top Left: 213, 132 *Top Right: 3412, 4123*

Bottom Left: 465312, 253146 *Bottom Right: 31254, 14325*

9. (First Seen Japanese Sums)^2 - 165 points (4 x 36 + Bonus: 21)

Fill the grid with digits 1-5 so that no digit is repeated within a row or a column, and blacken all the remaining cells of the grid. Numbers outside the grid indicate the first seen sums of continuous number groups encountered in the corresponding directions. A single number in a direction should also be considered as a number group. There must be at least one blackened square between different number groups.





Top Left: 14-35-, -35-21

Top Right: -5-3-4, 21-453

Bottom Left: -4--13, 2-534-

Bottom Right: 1--354, -542--