2014 Korea Open

KCPA 2014 Sudoku/Puzzle Championship

Sudoku/Puzzle

Instruction Booklet

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한국창의퍼즐협회 Korea Creative Puzzle Association 이데일리 이데일리TV puzzle land (주)퍼즐랜드 CPS CPS교육연구소 WORLD PUZZLE FEDERATION

This is **final version** of Instruction Booklet.

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Total	1,000

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1 ~ 3. Classic Sudoku (22, 48, 62 points)

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

4. Killer Sudoku (42 points)

Standard Sudoku rules apply. The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.

5. Non-Consecutive Sudoku (42 points)

Standard Sudoku rules apply. Numbers placed in adjacent cells must not be consecutive.

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

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

6. Extra Regions Sudoku (26 points)

Standard Sudoku rules apply. Each of the shaded regions must also contain each number from 1-9 exactly once.

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

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

7. Thermo Sudoku (90 points)

Standard Sudoku rules apply. Starting at the "bulb", numbers placed along each marked thermometer must form a strictly increasing sequence.

8. Even Sandwich Sudoku (70 points)

Standard Sudoku rules apply. The clues outside the grid indicate all numbers in the corresponding direction whose two neighbouring cells in that direction both contain even numbers.
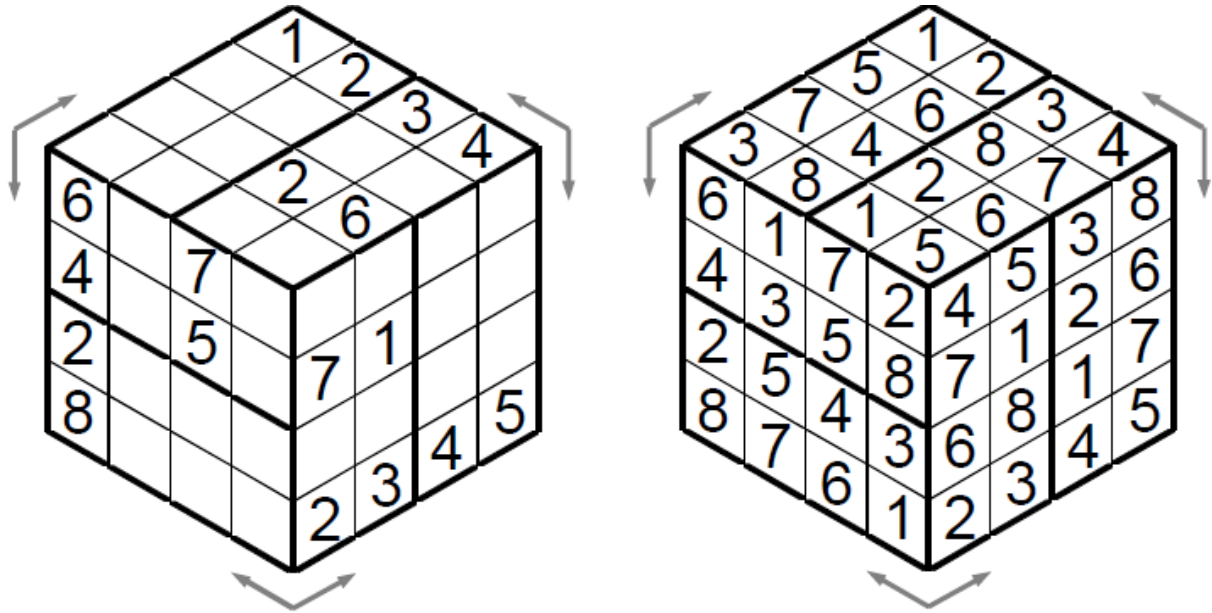
9. Cubic Sudoku (12 points)

Place a number from 1-8 in each empty cell in the grid such that each generalised row, and marked 8-cell region contains each number exactly once. Note that generalised rows pass through parallel edges of adjacent cells.

10. X-Sums Sudoku (86 points)

Standard Sudoku rules apply. The clues outside the grid indicate the sum of the first X numbers placed in the corresponding direction, where X is equal to the first number placed in that direction.

	1	10	18	15	20	33	35	36	45	
1										45
34										21
22										6
45										36
33										15
12										3
38										28
35										10
5										1
	7	18	17	30	30	36	38	45	1	

	1	10	18	15	20	33	35	36	45	
1	1	2	3	4	5	6	7	8	9	45
34	7	8	9	1	2	3	4	5	6	21
22	4	5	6	7	8	9	1	2	3	6
45	9	1	2	3	4	5	6	7	8	36
33	6	7	8	9	1	2	3	4	5	15
12	3	4	5	6	7	8	9	1	2	3
38	8	9	1	2	3	4	5	6	7	28
35	5	6	7	8	9	1	2	3	4	10
5	2	3	4	5	6	7	8	9	1	1
	7	18	17	30	30	36	38	45	1	

11. Gappyblocks (54 points)

Shade two cells in each row and each column so that they don't touch each other, not even diagonally. Each clue outside the grid is the number of white cells between the two black cells in the corresponding row or column.

Answer: Enter the column number of the first shaded cell in each row. (Example: 261617372)
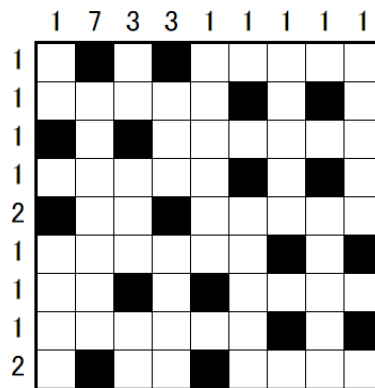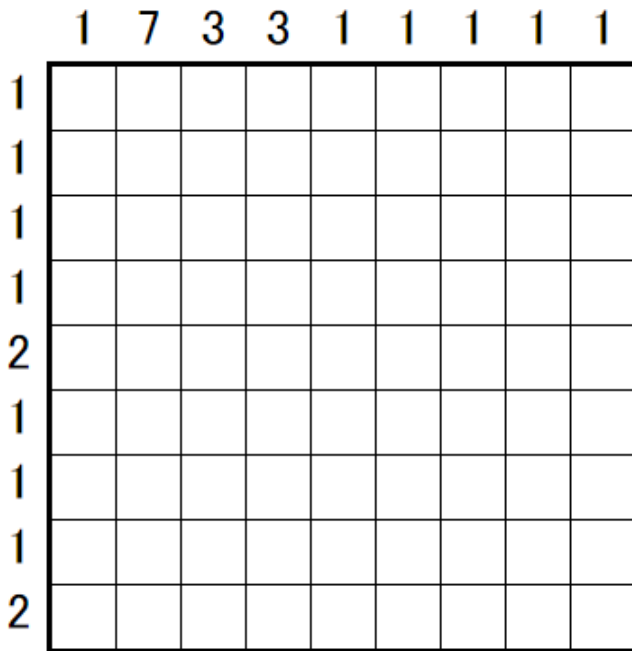
12. Walls (34 points)

Draw a single horizontal or vertical line across the full width or height of the centre of every white cell, such that the total length of all lines touching each black cell is equal to the given number of cells.

Answer: For the marked rows/columns show the contents of each cell: H for a horizontal line, V for a vertical line. Ignore clue cells. (Example for row 5 = VVHH, column 2 = VVVH)
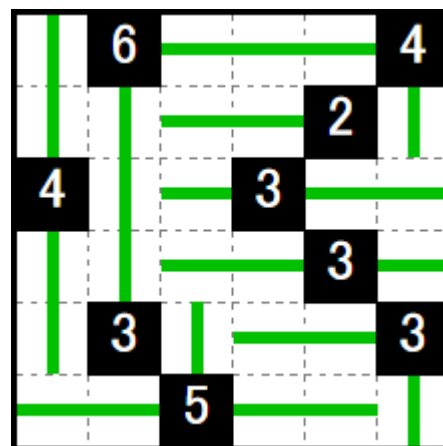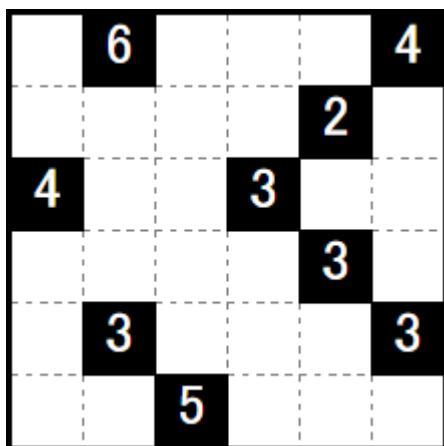
13. Magic Labyrinth (22 points)

Enter the digits 1-N **(1-3 in example)** into the grid, so that each digit appears exactly once in every row and column. Following the path through the grid, starting from the outside, the digits 1, 2, 3, ..., and N must be repeatedly encountered in that order, i.e. 1, 2, 3, ..., N, 1, 2, 3, ..., N, 1, etc.

Answer: For each designated row/column, enter its contents. Use 'X' to designate an empty cell. (Example for row 1 = XX32X1, column 5 = XX23X1)

14. Five Cells (78 points)

Divide the diagram along the grid lines into regions of exactly 5 cells. Numbers in the grid indicate how many of the four edges of the cell are used by region borders (the border of the diagram is also counted). A region may contain any number of numbered cells (even none).

Answer: Enter the number of cells in each connected group (between bold lines) in the marked row/column. (Example for row 2 = 113, column 4 = 122)

15. Tapa (49 points)

Shade some cells to create a continuous wall. Numbers in a cell indicate the length of shaded cell blocks in its neighboring 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 2×2 square or larger. There are no wall segments on cells containing numbers.
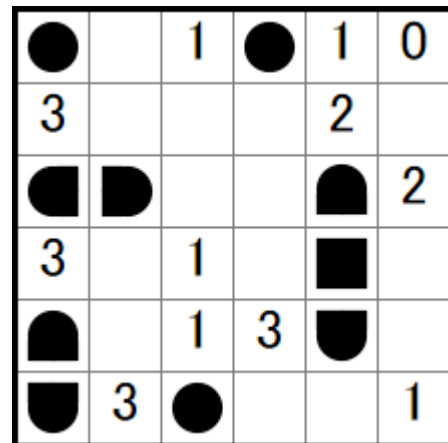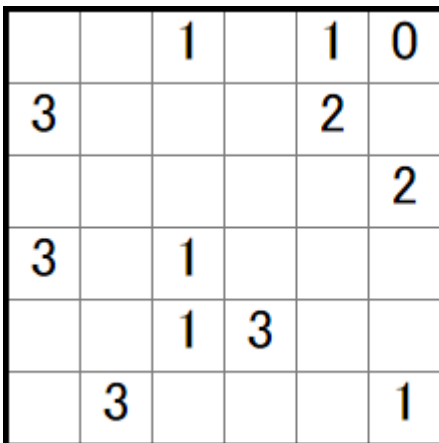
Answer: For each designated row, enter the length in cells of each of the shaded segments from left to right. Use only the last digit for two digit numbers; e.g., use '0' for segment of size 10. (Example for row 1 = 6, column 4 = 13, column 5 = 111)
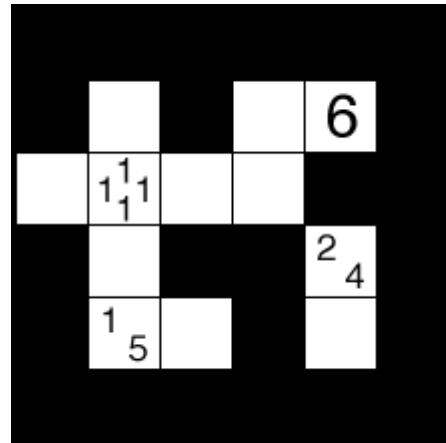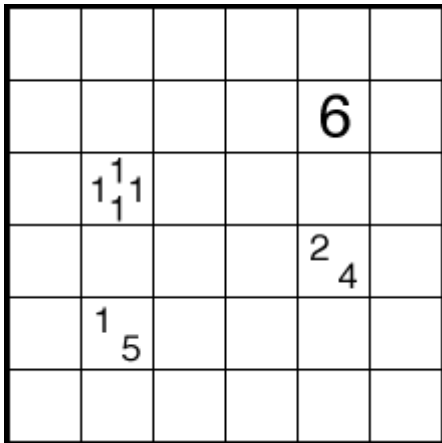
16. Battlemines (73 points)

Place the given set of ships into the grid. Ships cannot touch each other, not even diagonally. Clues inside the grid indicate the number of adjacent squares, including diagonally adjacent squares, containing ship segments. Ships cannot be in a cell with a wave/clue.

Answer: For each row from top to bottom, enter the number of the first column from the left where a ship segment appears. Use **both** digit for two digit numbers. If the row is empty, enter '0'. (Example: 101511)

17. Loop Finder (27 points)

Draw a loop that visits every dot. The loop cannot cross or touch itself at any point. Only horizontal and vertical lines between dots are allowed. Some parts of the loop are already given.

Answer: For each designated row, enter the length in cells of the horizontal loop segments from left to right. Use only the last digit for two digit numbers; e.g., use '0' for a segment of length 10. If the loop only has vertical segments in the marked row, enter a single digit '0'. (Example for row 6 = 22, column 5 = 11)
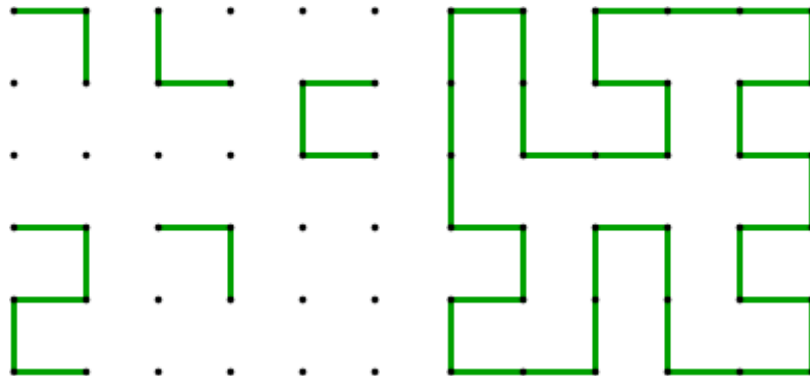
18. Kurotto (65 points)

Shade some cells so that each circled number represents the total count of shaded cells in connected groups sharing an edge with that number. Cells with circles cannot be shaded.

Answer: For each designated row, enter the length in cells of each of the shaded segments from left to right. Use only the last digit for two digit numbers; e.g., use '0' for segment of size 10. (Example for row 3 = 11, column 2 = 211)
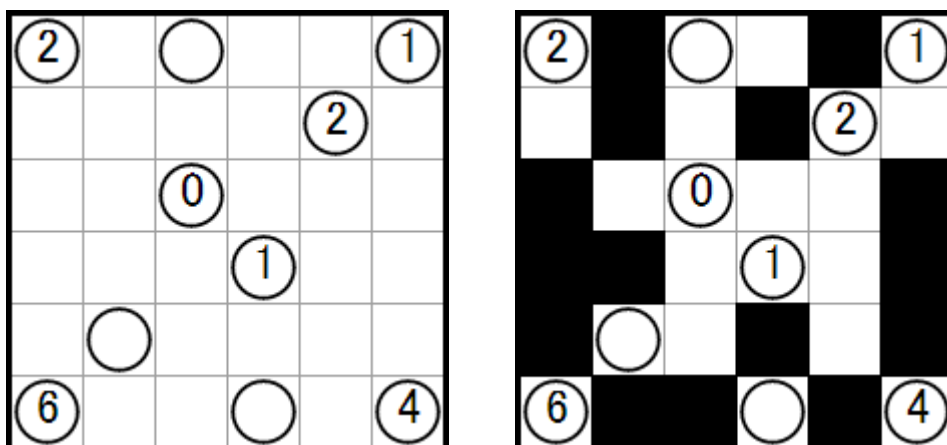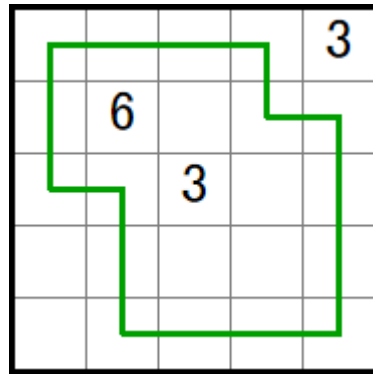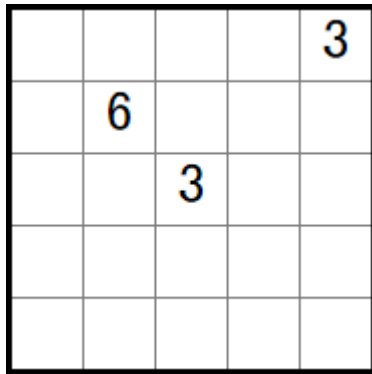
19. Bosnian Road (29 points)

Draw a single closed snake-like loop that is one cell wide and does not touch itself, not even diagonally. Numbers in the grid indicate how many cells around the number's cell (horizontally, vertically or diagonally) are visited by the loop.

Answer: For each row from top to bottom, enter the number of cells that belong to the loop. (Example: 43324)

20. Trinudo (69 points)

Fill each empty cell with a number between 1-3 such that every number in the grid is part of a continuous region of that many cells. A region is continuous whenever two cells touch orthogonally. Two different regions made up of the same number of cells cannot touch orthogonally. The circles in the cells are only used for entering your answer.

Answer: Enter the size of the polyomino each circle is in, reading the circles from left to right. (Example: 211321)