INSTRUCTION BOOKLET

Crossudoku

Fill in the grid with the digits 1 through 9 so that every outlined cross contains each digit exactly once. Digits cannot repeat within any single row or column.

Answer key: write the total of the five circled cells. For the example the answer would be: 31.
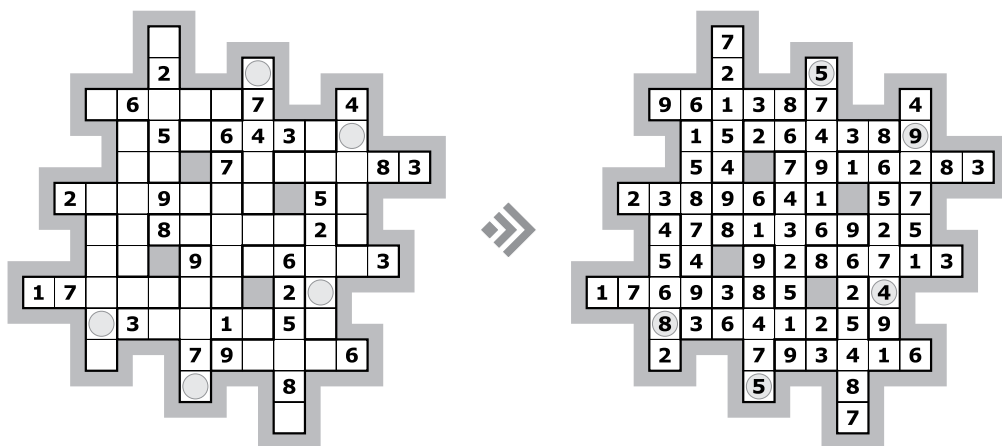
Heterocut

Divide the grid into some different shapes of 2, 3, 4, or 5 squares. Some cuts are already made. Arrows point to the shape of bigger area. Shapes cannot be identical even being rotated/reflected.

Answer key: write the letters corresponding to all used pentamino elements, in alphabetical order. For the example the answer would be: U.
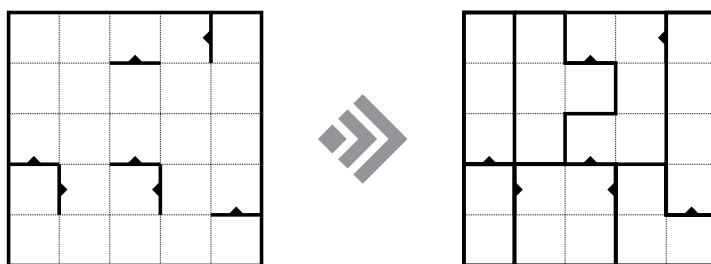
Tapa

Paint some squares black to create a continuous wall. Number(s) in a square indicate the length of the black cell blocks on its neighbouring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form any 2x2 regions. There are no wall segments on cells containing numbers.

Answer key: write the areas of all unpainted regions larger than 1 cell in increasing order. For the example the answer would be: 2,3,4,4.
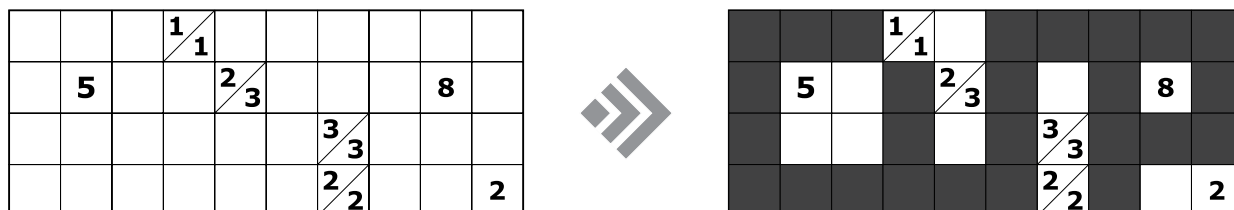
Fuzuli

Fill in some cells of the grid with digits 1 to 4/5 so that in every row and in every column each digit appears exactly once. There cannot be any 2x2 square of filled-in cells in the grid.

Answer key: write the content of two main diagonals, replacing empty cells with "-", first from top left to bottom right, then from bottom left to top right. For the example the answer would be: 13-31, 22-13.

Polygraph

Draw a single continuous loop by connecting neighbouring dots horizontally or vertically. Digits inside the loop indicate the number of its edges used by the loop. Digits outside the loop indicate the number of its edges NOT used by the loop.

Answer key: write the total of all digits outside the loop. For the example the answer would be: 18.
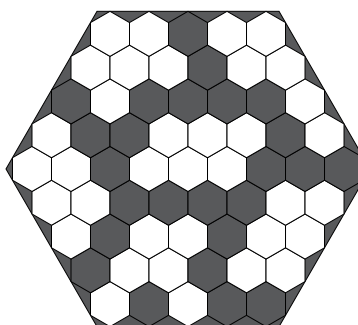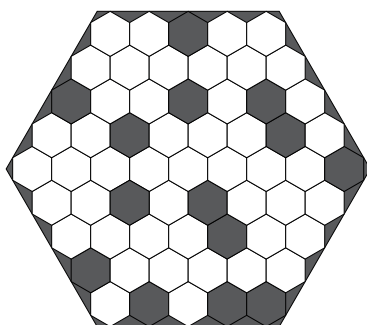

Hexa islands

Paint some more hexagons black so that there are six white areas, each consisting of six adjacent hexagons. The white areas cannot touch each other.

Answer key: for each row, from top to bottom, write the number of additionally painted hexagons. For the example the answer would be: 0,1,2,1,3,2,1,1,0.
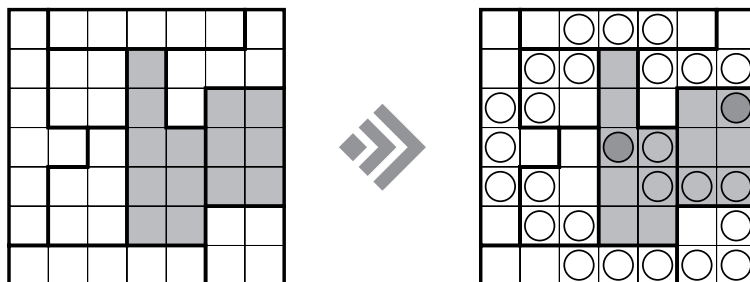
Snake.BY

Draw in the grid a snake not touching itself. Each outlined region must contain exactly 3 cells occupied by the snake. The regions that contain the head and the tail of the snake are marked by grey color.

Answer key: write the number of occupied cells in each row, from top to bottom. For the example the answer would be: 3,5,3,3,5,3,5.

Hungarian pentamino

Place the pieces inside the diagram in such a way that they don't touch each other anywhere, not even diagonally. Individual pieces may be rotated and/or mirrored. From the left to the right, next from above to the bottom of the grid every third cell occupied by the pentomino is marked.

Answer key: write the content of two main diagonals using corresponding letters for the pentaminoes and "-" for empty cells, first - from top left to bottom right, then from bottom left to top right. For the example the answer would be: L-TT-O-,I-TT-S-.
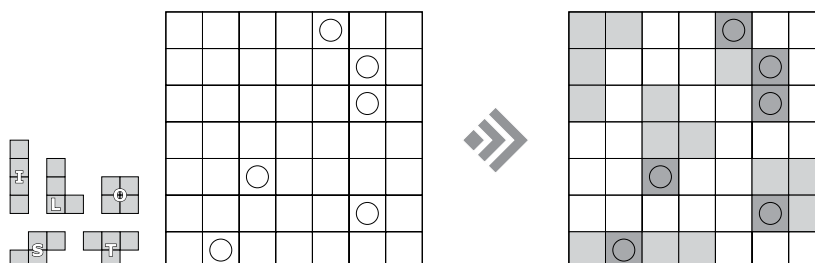
Pentamino in half

A complete set of pentaminoes divided into two groups of six elements each was placed into two 9x9 grids with no elements touching or overlapping each other. Pentaminoes can be rotated and/or mirrored. Each number outside the grid shows the sum of the horizontal or vertical distances from the grid border to the nearest element for both grids. There are no empty rows and columns. Find the position of the pentaminoes.

Answer key: write the letters corresponding to the five pentaminoes placed in the same grid as the "I" element in alphabetical order. For the example the answer would be: N,T,U,V,Y.
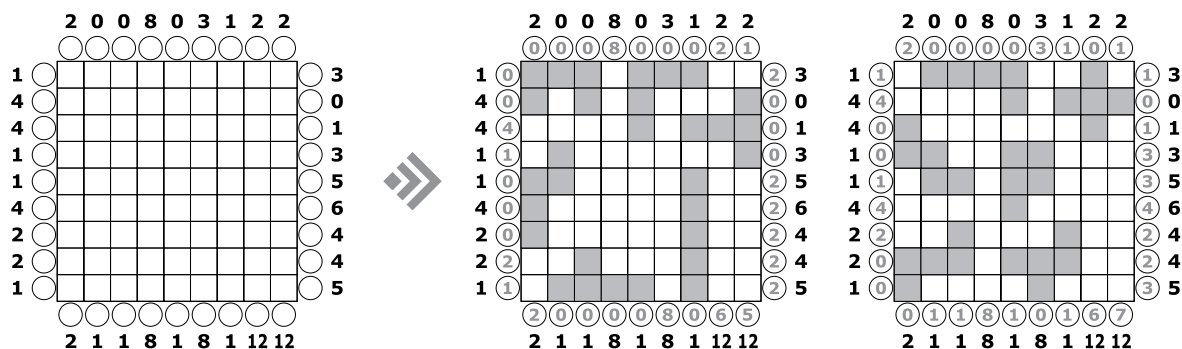
Kenken

Fill in the grid so that each row and column contains digits 1 through 6. Number in each outlined area should be calculated from all the digits in that area, using the indicated arithmetic sign.

Answer key: write the content of two main diagonals, first - from top left to bottom right, then from bottom left to top right. For the example the answer would be: 513115,455551.

Heyawake

Paint some cells black so that all the requirements below are met:
- painted cells cannot be orthogonally connected; - all white cells must be interconnected;
- areas with the numbers must have exactly that amount of painted cells, areas without the numbers may have any number of painted cells;
- a straight line of connected white cells cannot contain cells from more than two areas.

Answer key: for each row, from top to bottom, write the number of painted cells. For the example the answer would be: 1,3,1,2,1,3.

Futoshiki

Fill in the grid so that each row and column contains digits 1 through 7. All comparison signs must be true.

Answer key: write the content of two main diagonals, first - from top left to bottom right, then from bottom left to top right. For the example the answer would be: 5736262, 3156716.

Number loop

Draw the single closed loop, not touching or intersecting itself, going only horizontally or vertically and passing through the centers of the cells. Numbers occupied by the loop cannot be repeated within single row and column. Sums of those numbers are shown outside the grid.

Answer key: starting from the topmost "1" used by the loop, write the number of loop cells between all consecutive "1"s. For the example the answer would be: 3,2,2,9,1.

5	4	1	3	5	1	8
4	1	2	5	4	3	12
3	2	5	4	1	2	11
2	4	3	1	5	4	11
4	5	1	2	3	1	15
1	3	4	1	2	3	8
9	15	12	11	13	5	

5	4	1	3	5	1	8
4	1	2	5	4	3	12
3	2	5	4	1	2	11
2	4	3	1	5	4	11
4	5	1	2	3	1	15
1	3	4	1	2	3	8
9	15	12	11	13	5	

Dotted snake

Draw in the grid a 45-cells long snake not touching itself. Every third cell (3,6,9...) of the snake has a dot on it. Numbers outside the grid reveal how many dots are in the corresponding row or column. Head, tail and the middle of the snake are given. The black cells are not the part of the snake.

Answer key: write the number of turns the snake makes between the head and the middle, followed by the number of turns the snake makes between the middle and the tail. For the example the answer would be: 6,4.

3	1	1	0	2	2	0	2	
33								2
								2
								1
								2
								0
							1	2
								2
					17			2

3	1	1	0	2	2	0	2	
33								2
								2
								1
								2
								0
							1	2
								2
					17			2

Even better

Place in the grid some of the given figures, all different. You may rotate and/or reflect them. Black cells cannot be covered. You're given with some initial score. Each uncovered cell that belongs to the area of even size decreases your score by 5 points. Each uncovered cell that belongs to the area of odd size decreases your score by 12 points. Maximize your score.

Answer key: first write your score; then describe all the placed figures by writing the corresponding letters followed by the coordinates of their circled cells. For the example the answer would be (if the initial score was 100): 70;VA2,PB3,ZD2,TE4.

Knight tail

Starting with any cell make as many chess knight moves as possible, so that no row and column is visited more than three times. No cell can be visited more than once. You cannot make moves to the black cells.

Answer key: first write the number of visited cells; then write the coordinates of visited cells in order of visiting, for all the cells except the first and the last you can omit the number of the row. For the example the answer would be: 14;C2,E,F,E,C,D,B,A,B,D,E,C,D,F4.