# INSTRUCTION BOOKLET

1-9-loop

Draw a single closed loop going only vertically and horizontally and passing through every cell exactly once. Lengths of the parts of the loop connecting the cells with the circles should alter in a way 1-9-1-9-…
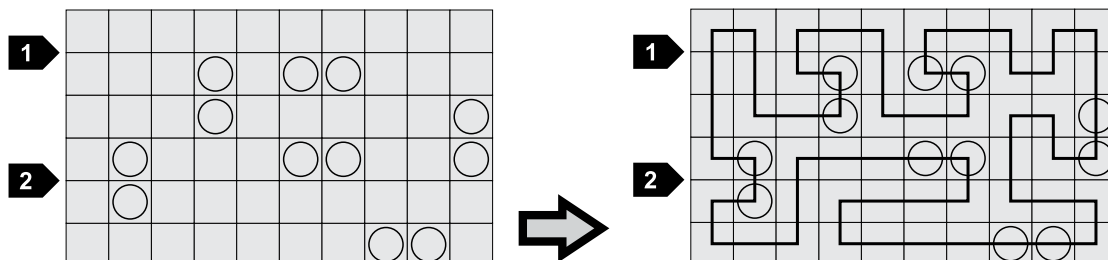
Answer key: write down the distances between vertical lines for indicated rows. For the example the answer would be: 1121211,141.

Naval Minesweeper

Place in the grid the given number of mines. Digits inside the grid show the amount of mines in surrounding cells. Mines cannot be placed in the cells with digits. Additionally place in the grid the given fleet. Ships cannot overlap the cells with digits and mines. Ships cannot touch each other even diagonally. Each ship should touch (by sides/corners) as many mines as the number of cells it occupies.
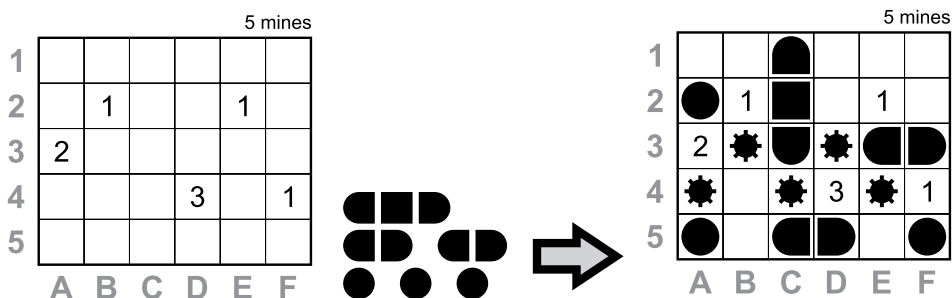
Answer key: write down the coordinates of 1-cell ships, going from top to bottom. For the example the answer would be: A2, A5, F5.

Fortress Sudoku

Fill in the grid so that every row, column and 3x3 box contains the digits 1 through 9. Digits in grey cells should be greater than the digits in adjacent white cells.
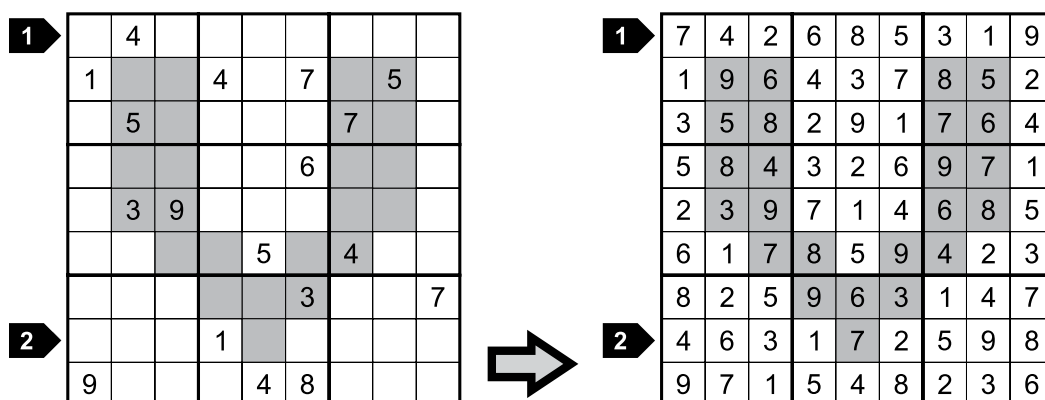
Answer key: write down the content of indicated rows. For the example the answer would be: 742685319,463172598.

Five Pairs Sudoku

Fill in the grid so that every row, column and 3x3 box contains the digits 1 through 9. The 10-cells grey areas inside the grid should contain two sets of five digits.

Answer key: write down the content of indicated rows. For the example the answer would be: 526819347,164798253.

Spiral Snake

Draw a single 45-cells long 1 cell-wide snake, not touching itself even diagonally. Its head and tail are placed in the grey cells. The central cell is marked with the circle. Divide the grid into some areas with central symmetry. All the symmetry points are given. Areas should be symmetrical with regard to the cells occupied/unoccupied by the snake.

Answer key: write down the content of indicated diagonals, replacing occupied cells with "S" and unoccupied cells with "-". For the example the answer would be: S-S---S-S-,S--S--S---.

1-2-snake

Draw a single 45-cells long 1 cell-wide snake, not touching itself even diagonally. Its head and tail are placed in the grey cells. The central cell is marked with the circle. From some end of the snake to another the sequence 1-2-1-...-1-2 should be read. Every row/column should contain digits 1 and 2 exactly once. Some digits are already given. The snake cannot overlap the black cells.

Answer key: write down the content of indicated rows, replacing occupied but not numbered cells with "S" and unoccupied cells with "-". For the example the answer would be: --SS21--S,------1S2-.

Slitherlink snake

Draw a single 45-cells long 1 cell-wide snake, not touching itself even diagonally. Its head and tail are placed in the grey cells. The central cell is marked with the circle. The snake cannot go through the numbered cells. Numbers show the amount of cells occupied by the snake in four neighbouring cells.

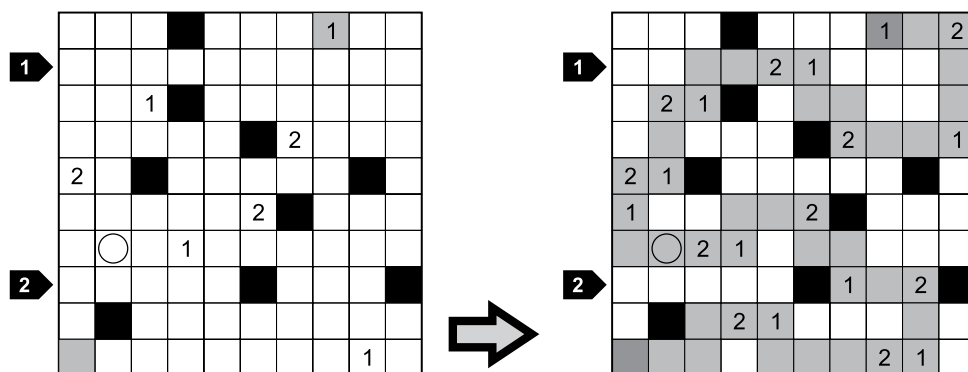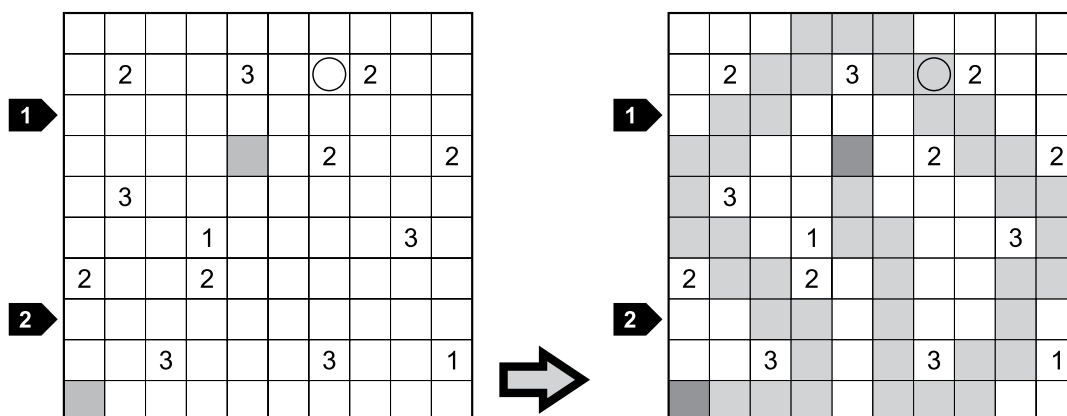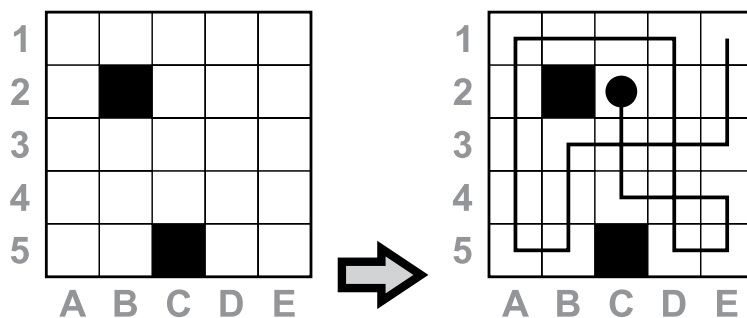*Answer key: write down the content of indicated rows, replacing occupied cells with "S" and unoccupied cells with "-". For the example the answer would be: -SS---SS--,--SS-S--S-.*

Tiger in the woods

Draw a path in the grid that starts from any white square, travels horizontally and vertically and passes through all white squares. The path may cross itself but it may not overlap itself. The path is allowed to take a turn after hitting either a black square or the edge of the grid. The starting/finishing square may not be visited later/before.

Answer key: write down the coordinates of starting square and finishing square. For the example the answer would be: C2,E1.

Pentatouch

Place the complete pentamino set into the grid. Pentaminoes can touch each other only by a corner. All nodes where two pentaminoes touch are marked with a dot. Elements can be rotated and/or refected.
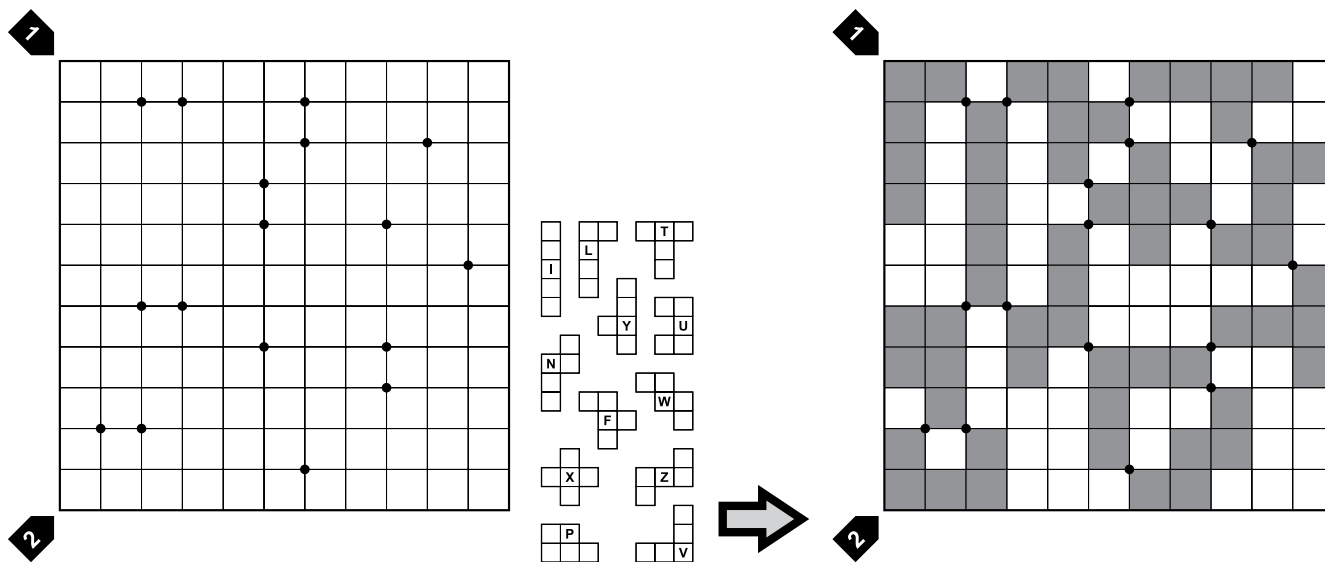
Answer key: write down the content of indicated diagonals, replacing occupied cells with the corresponding letter and unoccupied cells with "-". For the example the answer would be: L-I-N--VW--,U--NN-XX---.

Halfsuites

Cut all the playing card suit symbols in half and remove the colors. Using these halfsuits your task is to re-fill the grid according to the rules:

  – a column must contain all the 4 original suits
  – a row mustn't contain any halfsuit more than once
  – a suit mustn't touch the same suit, diagonal touch is allowed.
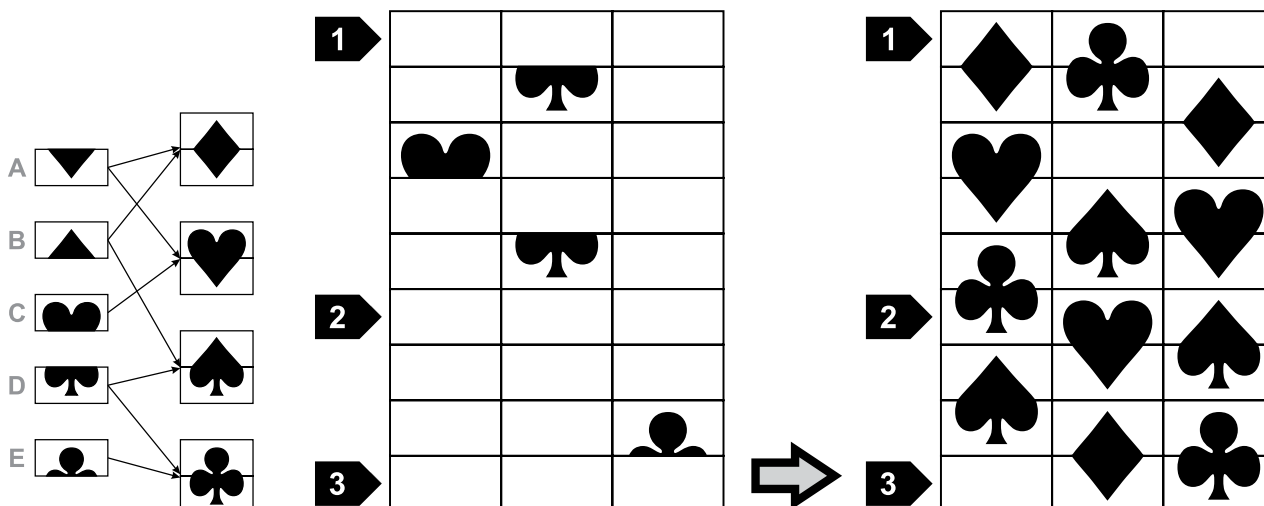
Answer key: write down the content of indicated rows, replacing cells with halfsuits with the corresponding letters and empty cells with "-". For the example the answer would be: BE-,DCB,-AD.

Magic Summer

Place in the grid digits from 1 to 4(5), so that each row and column contains each digit exactly once. Numbers outside the grid show the total of all numbers appearing in corresponding rows and columns. These numbers are separated by at least one empty cell.

Left grid (empty):

						46
						127
						64
						2413
						415
						1432

37 136 19 145 235 343

Right grid (solved):

2		1		4	3	46
	1	2	3		4	127
4	3			2	1	64
	2	4	1	3		2413
3			4	1	2	415
1	4	3	2			1432

37 136 19 145 235 343

Answer key: write down the content of indicated diagonals, replacing empty cells with "-". For the example the answer would be: 21-11-,1-4--3.

Knight's Tale Sudoku

Fill in the grid so that every row, column and 3x3 box contains the digits 1 through 8 and a chess knight. Knights cannot attack each other. Knights cannot attack the same digit more than once.

Left grid (puzzle):

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

Right grid (solved):

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

Answer key: write down the content of indicated rows, replacing cells with knights with "K". For the example the answer would be: 657K43812,1823574K6.

Easy as skyscrapers

Fill the grid with numbers from 1 to 3 (representing the heights of buildings) and letters A, B, C, so that each row and column contains exactly one instance of all these symbols. Digits outside the grid show the number of buildings visible from their positions (shorter buildings are hidden behind the taller ones). Letter outside the grid appear frst in corresponding directions.

Left grid (puzzle):

	1	3	2		B	B	
3							
							1
2							
C							3
							1
	A		C		2	2	

Right grid (solved):

	1	3	2		B	B	
3	C	1	A	2	3	B	
	B	A	2	C	1	3	1
2	A	2	3	1	B	C	
C	3	C	B	A	2	1	3
	1	3	C	B	A	2	
	2	B	1	3	C	A	1
	A		C		2	2	

Answer key: write down the content of indicated diagonals. For the example the answer would be: CA3AAA,23B11B.

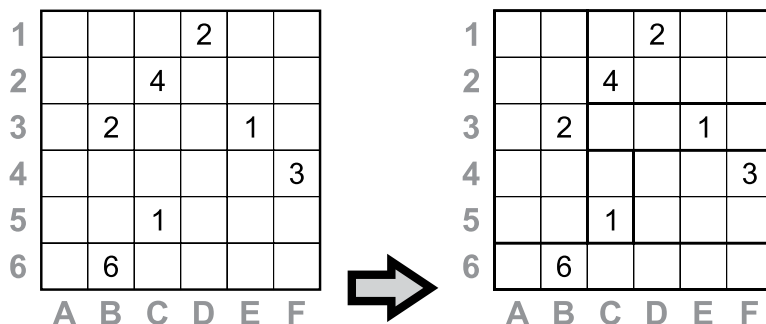## Different rectangles

Divide the grid into some rectangles (not squares!). Numbers should be equal to the size of one of the sides of the rectangle they're inside. All the rectangles should be different (to have 2x6 and 3x4 rectangles is ok, but 2x6 and 6x2 is forbidden).

Answer key: write down the coordinates of top left corners of all the rectangles, together with their areas, working downwards. For the example the answer would be: A110,A312,C42,D46,A66.

Double Tapa

Basic Tapa rule: Paint some cells black to create a continuos wall. Number/s in a cell indicate the length of black cell blocks on its neighbouring cells. If there's more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 area. There are no wall segments on cells containing numbers.
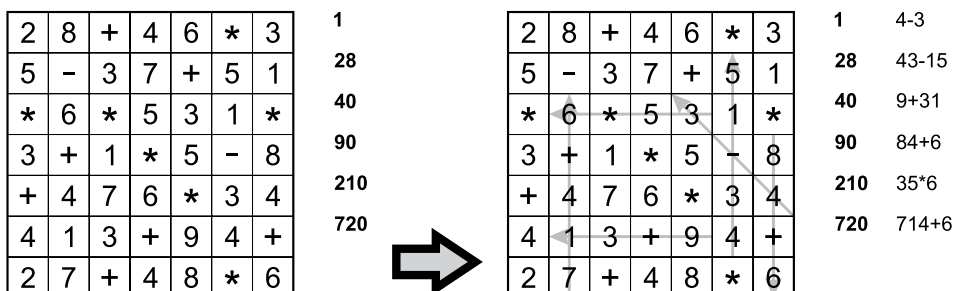
Additional Double Tapa rule: Paint two separate walls without crossing each other. All clues in the same cell indicate the same wall.
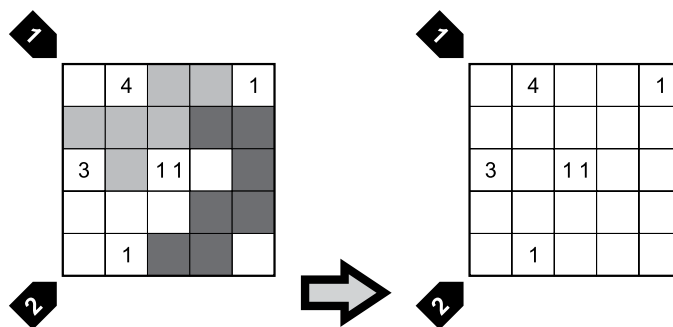
Answer key: write down the content of indicated diagonals, replacing cells containing the wall of the smaller area with "A", bigger area with "B" and empty cells with "-". For the example the answer would be: -A-B-,---B-.

Expression search

Find 10 expressions with the given results in the grid. They may be read in any direction. Each expression should contain exactly one sign of arithmetic operation.

2	8	+	4	6	*	3
5	−	3	7	+	5	1
*	6	*	5	3	1	*
3	+	1	*	5	−	8
+	4	7	6	*	3	4
4	1	3	+	9	4	+
2	7	+	4	8	*	6

1	4-3
28	43-15
40	9+31
90	84+6
210	35*6
720	714+6

Answer key: write down the expressions as they appear in the grid. For the result "1" in the example the answer would be: 4-3.