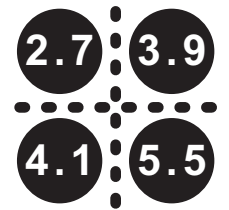
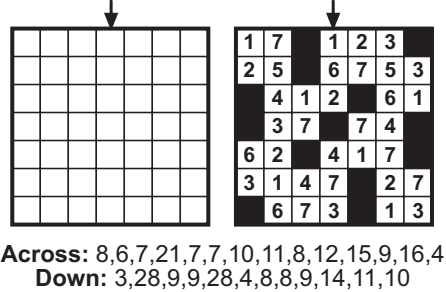
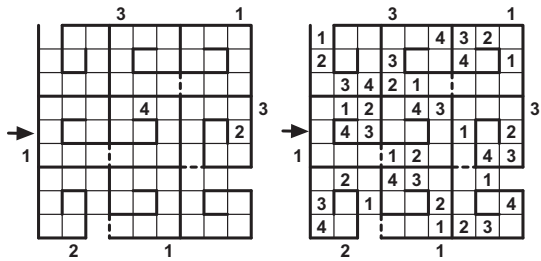


1-4. Previously On OAPC

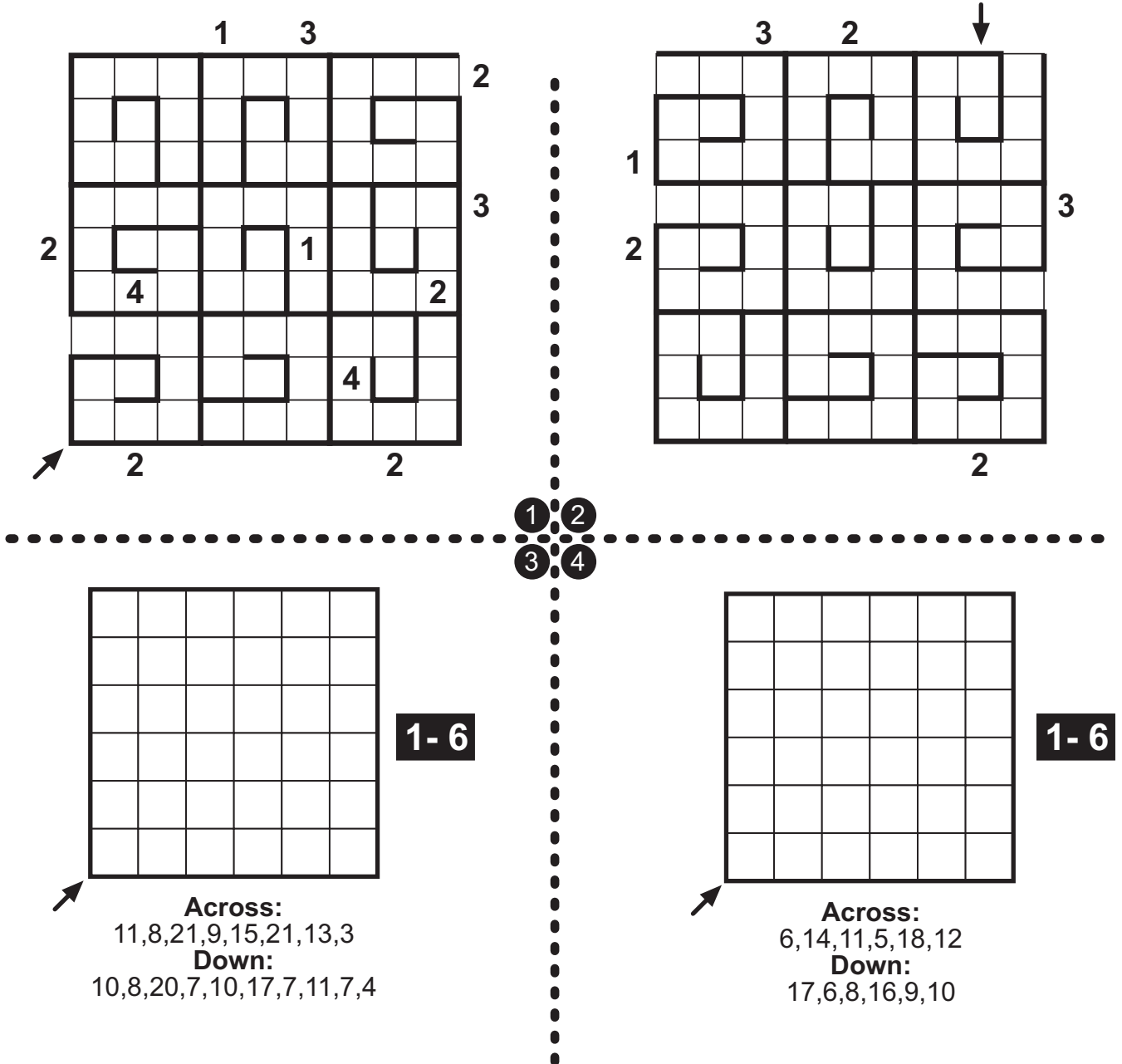
1-2: Snail Sudoku: Fill the grid with digits 1~4, so that each digit appears exactly once in every row, column and every 3x3 spiral. Digits should be placed orderly in the spirals, from the entrance to the center. The numbers outside the grid indicate the first seen number from that direction.

3-4: Diagramless Kakuro: Place the digits 1-n (1-7 for the example) and some black squares into the grid to form a valid kakuro puzzle. The black squares in the grid have 180-degree rotational symmetry, all white squares are connected, and all digits belong to a sum of two or more numbers in both directions. Clues given next to the grid indicate the sums that are formed in the grid. For the row clues, this means all clues in the first row (from left to right) are listed before clues in the second row, and so on. For the column clues, all sums that have their uppermost cell in the first row (from left to right) are listed before clues that have their uppermost cell in the second row, and so on.



Answer format:

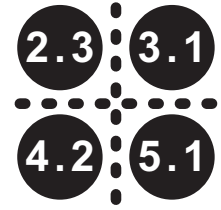
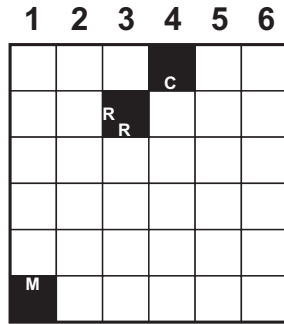
Write the content of the marked row/column. Use 0 for empty/blackened cells. 1-2: The answer for the example would be: 043000102 3-4: The answer for the example would be: 1620473



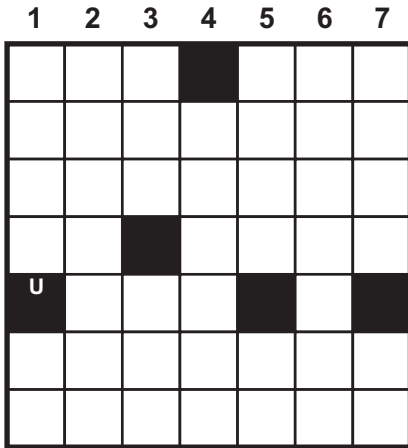
5-8. Rehber

Locate all the given words in the grid, reading either from left to right or from top to bottom. There may be some empty cells between the letters. There cannot exist any word which is not on the list. Clues inside the diagram indicate the first visible letter in the corresponding direction.

AR,AS,BU
DAM,DON,RUM
CAZA,KUZU,MART,
ORAK,RAJA
MACAR,SURAT
ABAJUR



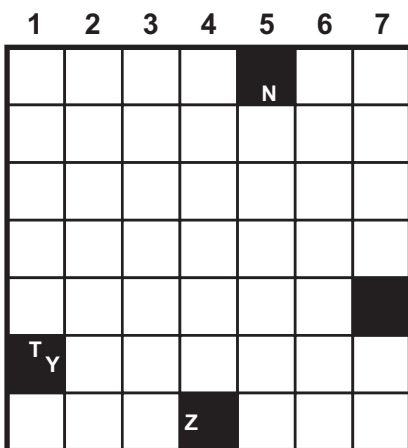
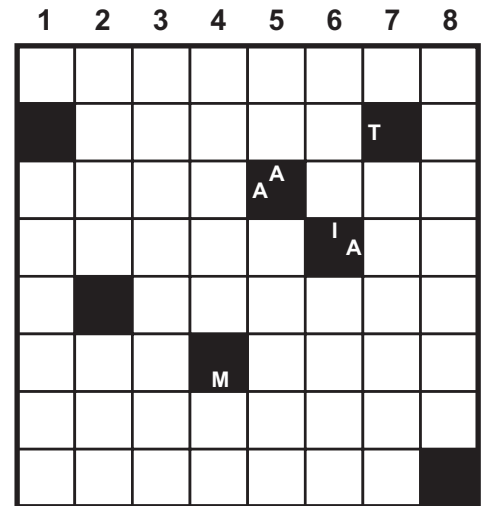
Answer format: For each row, write the column numbers of empty cells. Ignore cells with clues and use 0 if there is no empty cell in that row. The answer for the example would be: 0,4,3,12,16,2



AK
AR
DA
EN
OY
SA
UZ
ALI
KAS
OMO
ORG
OYN
ANIZ
DOGU
GUYU
MINO
OGUZ
UZAK
SALONE
AKSIYON

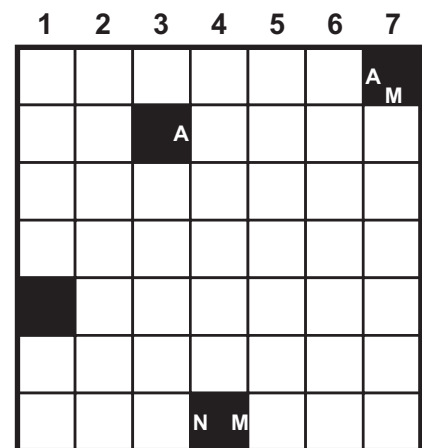
OAPC
SNYDER
VOIGT
JO
USA
GERMANY
JAPAN

BE
BEE
TEA
TNT
TOY
CUMA
DEEP
ESAS
TAPE
VEYA
TEMAS
SAINT



AL
AZ
EL
TE
TL
AIT
AYA
EMI
TIG
YOZ
AGRI
ARGO
ITRI
NIRE
YOGA
ANONIM
ANTALYA

IZ
MN
NE
ALM
ERN
FER
MIL
VER
YAT
ATAY
AZAR
LAKA
NURI
ALARM
KAVUN
MAFYA
MAYIN



9-12. Consecutive Loop

Fill the grid with digits 1-6/1-9 so that no digit is repeated within a row/column. Each pair of consecutive neighbours should have a line between them, forming a closed loop. All lines should be part of the loop. There cannot be any loop lines in the crossed places, and some lines are already given.

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

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



Answer format: For each row, write the even digits outside the loop. Use 0 for the rows without even digits. The answer for the example would be: 24,0,0,42,68,4682

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

1-6

3			4	
		4		2
5	1			
		6		1
6				
			5	1

1-6



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

1-9

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

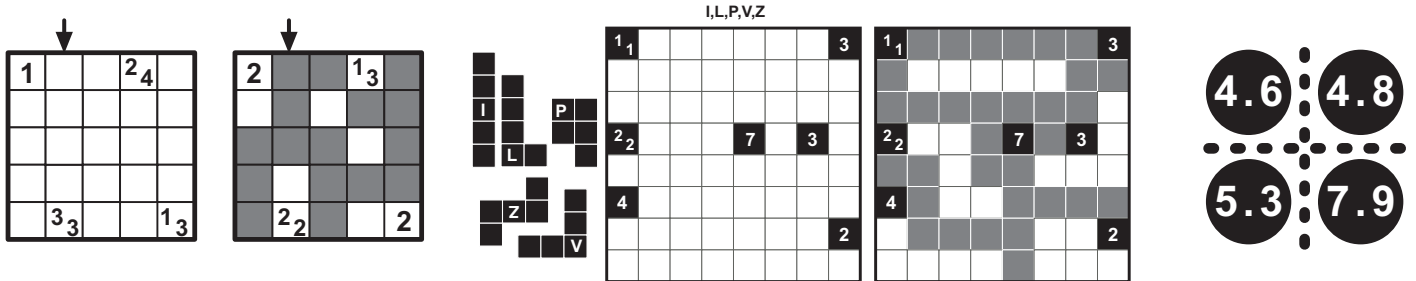
1-9

13-16. Tapa Variations

Paint some squares black to create a continuous wall. Number/s in a square indicate the length of 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 a 2x2 square or larger.

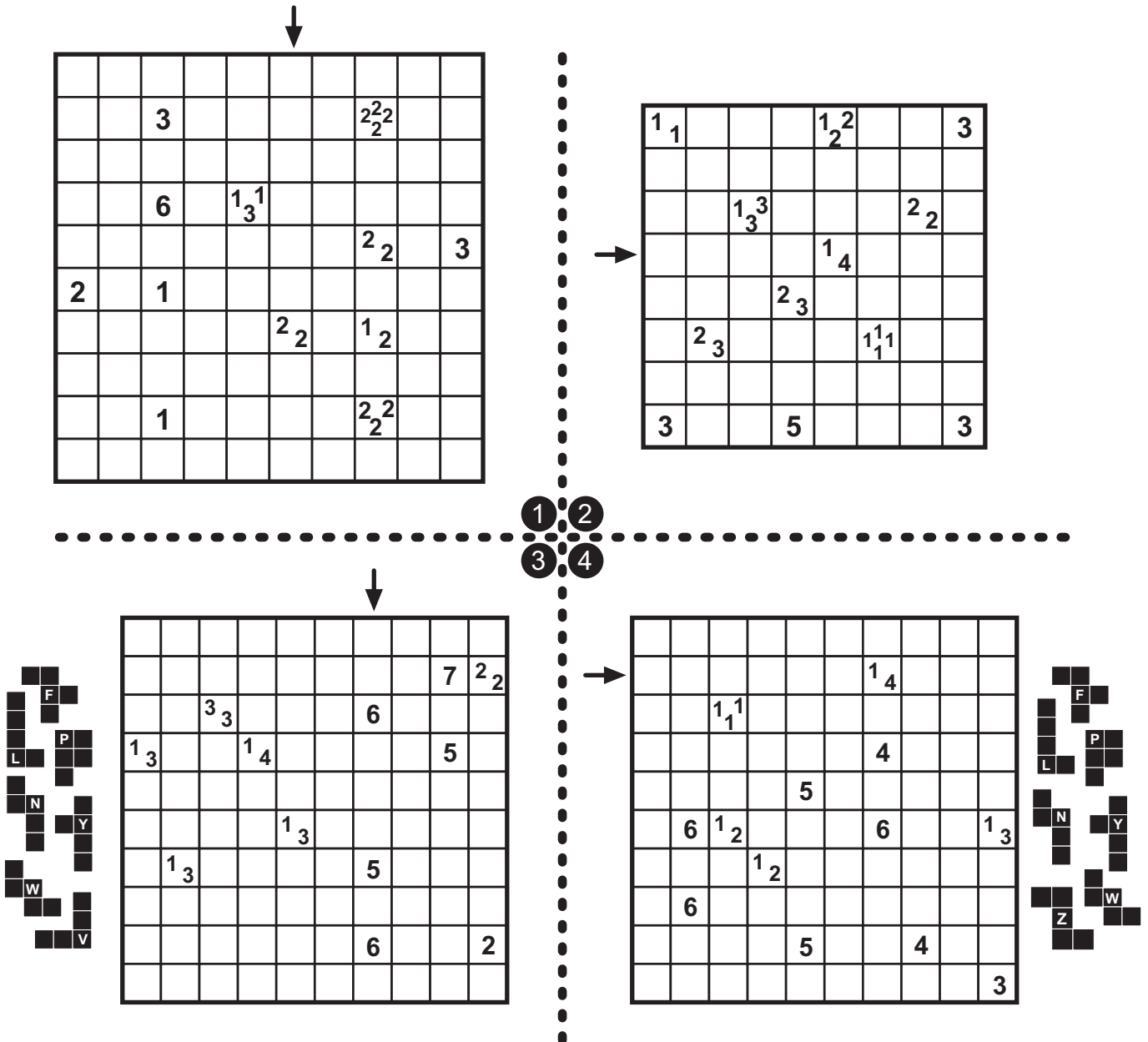
13-14: Knapp Daneben Tapa: All given numbers are wrong. The correct number is either 1 higher or 1 lower. A 1 can also be 0 in reality, but a 0 cannot become a 1.

15-16: Tapa Pentopool: All unpainted cells should form given different pentominoes. The pentominoes may be rotated and/or mirrored, and cannot touch each other from the sides. There are no wall or pentomino segments on cells containing numbers.



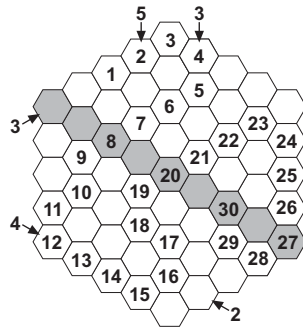
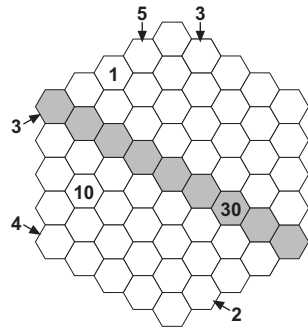
Answer format: Write the content of the marked row/column. Use 1 for blackened cells. Use 0 for empty cells and C for clue cells. 13-14: The answer for the example would be: 1110C

15-16: Use the corresponding letters for the pentominoes. The answer for the example would be: 1111V1PP

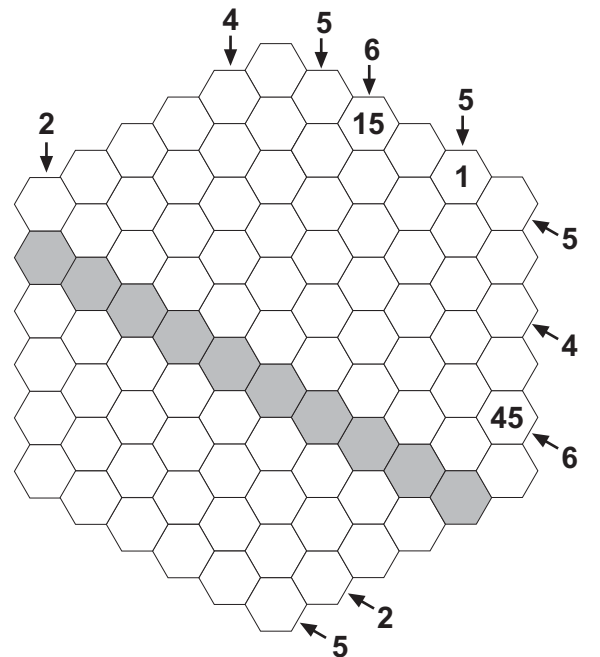
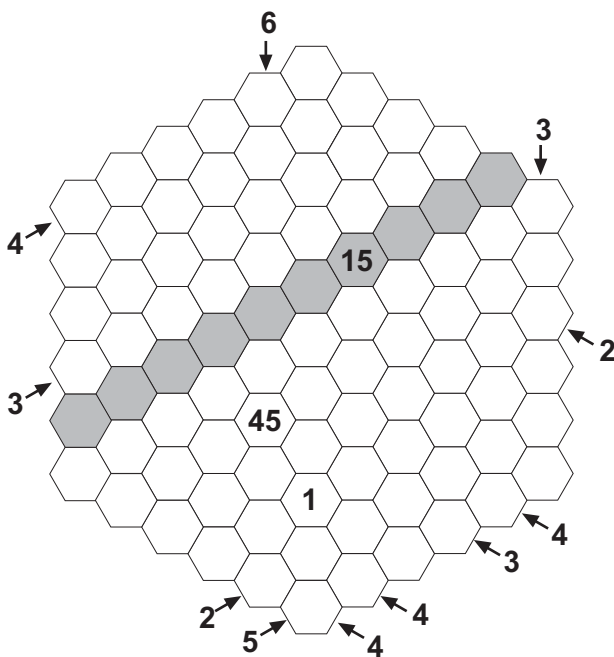
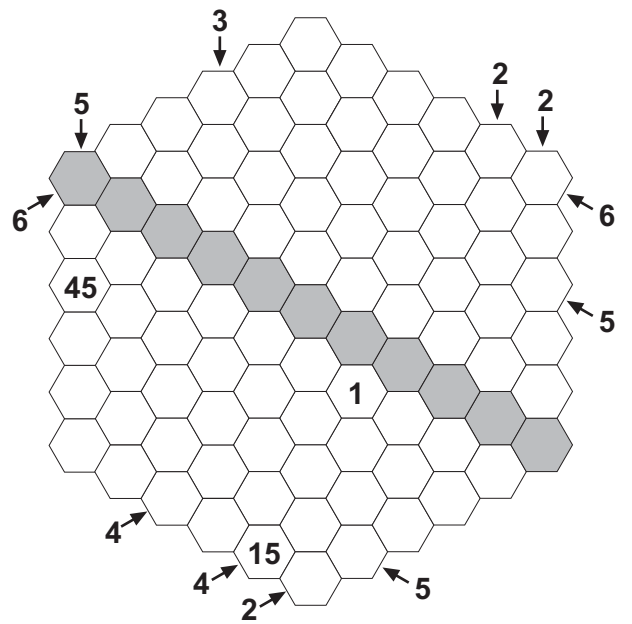
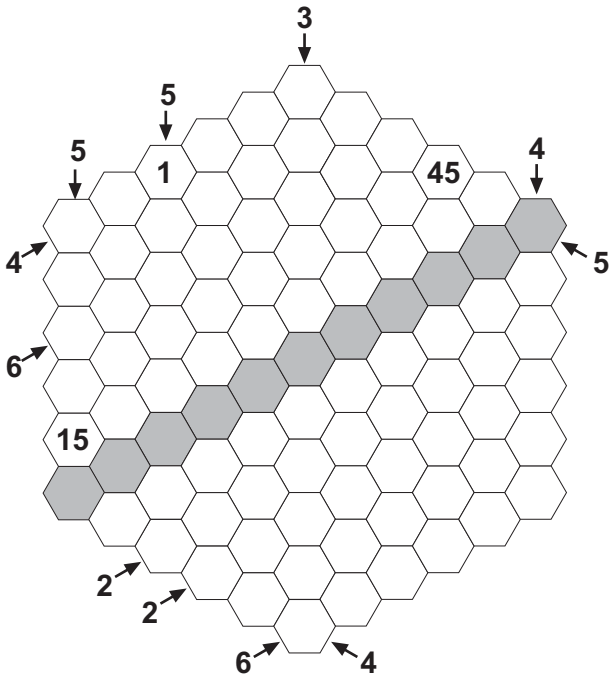


17-20. Abacus Snake

Locate a snake in the grid that is 45 cells long (30 for the example) and doesn't touch itself. The 1st, 15th and 45th (1st, 10th and 30th for the example) cells of the snake are given. Numbers outside the grid indicate the amount of snake segments in the corresponding directions.



Answer format: Write the content of the marked row, separated by commas. Use 0 for empty cells. The answer for the example would be: 0,0,8,0,20,0,30,0,27



21-24. Tapa Distiller

Paint some squares black to create a continuous wall. Number/s in a square indicate the length of 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 a 2x2 square or larger.

Clues of four puzzles are given in one grid. Distribute the clues to four grids and solve each puzzle. The cells with clues do not overlap, each clue cell should be fully visible in one grid only.

	3	5		1
	1 ₃	1 ₁	1 ₁	3
3	2 ₄	1 ₁	2	1 ₃
2		2	1	2

1 solved 8

2 solved 9

3 solved 12

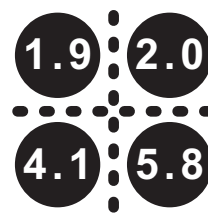
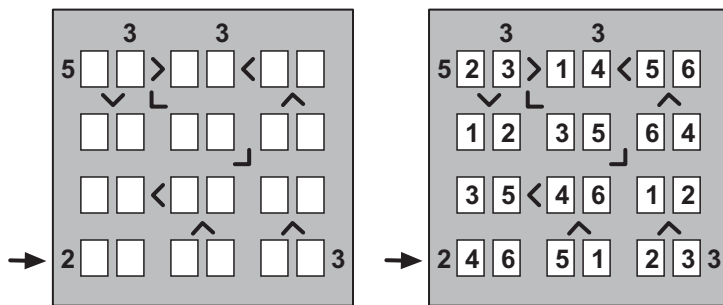
4 solved 16

Answer format: Write the content of the marked row/column. Use 1 for blackened cells. Use 0 for empty cells and C for clue cells. The answer for the first grid of the example would be: C1101

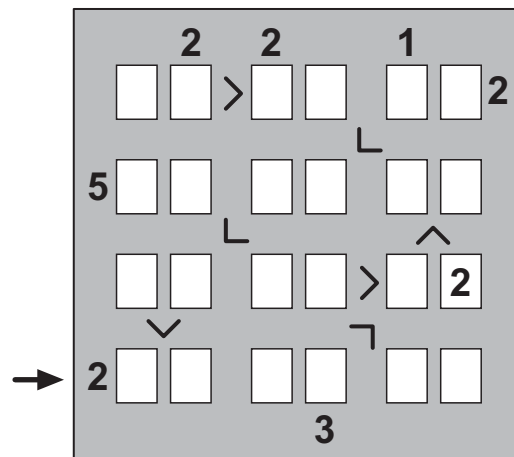
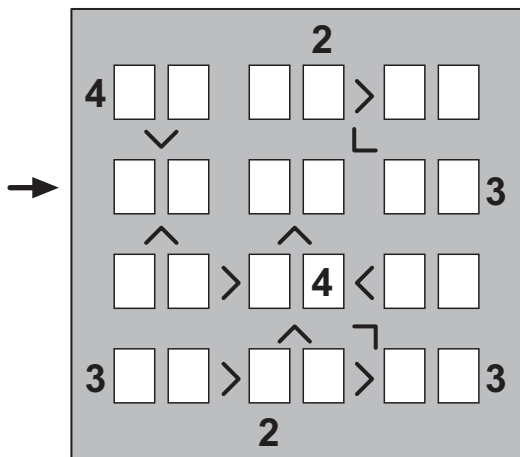
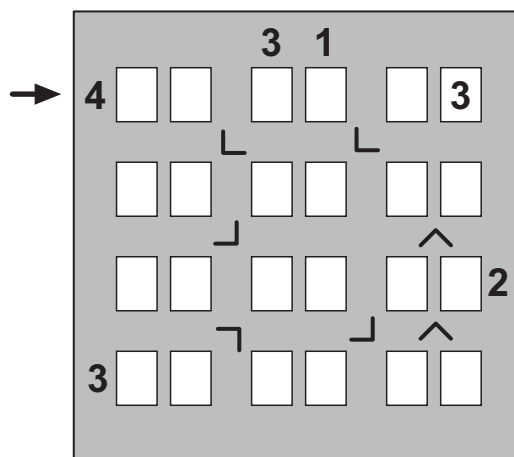
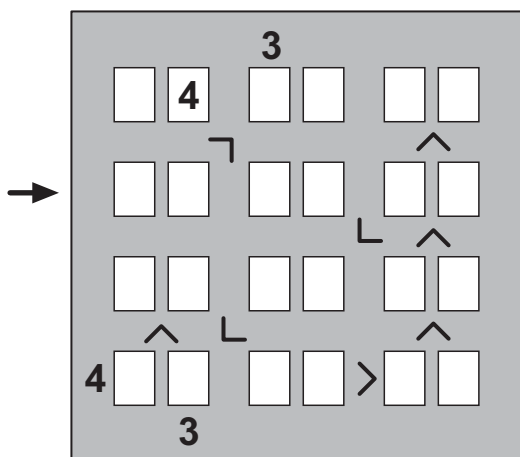
1	2	1 ₁	1 ₂	2	2	1	
		3	3	1 ₂	2	1	2
3	1 ₁	1 ₁				2	4
	1 ₂	2		1	3	1	3
	6	3	3				3
1	4				3	1	1

25-28. Skyscraper Blocks

Place digits 1-6 into the grid so that no digit is repeated within a row/column. The digits outside the grid indicate the number of buildings that can be seen from the corresponding direction. The buildings form two-digit numbers and the relations between some numbers are shown with a greater/less sign.



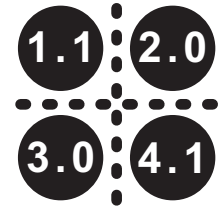
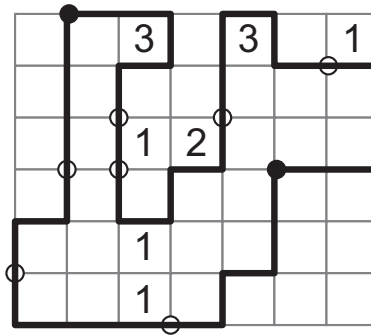
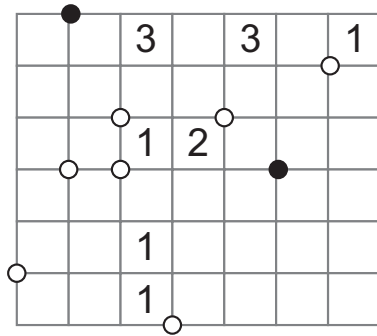
Answer format: Write the content of the marked row/column. The answer for the example would be: 465123



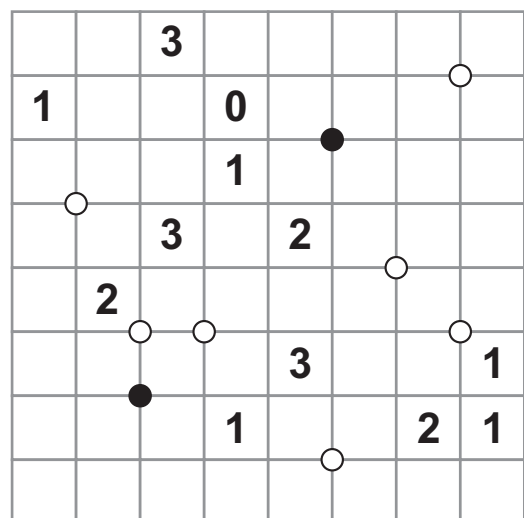
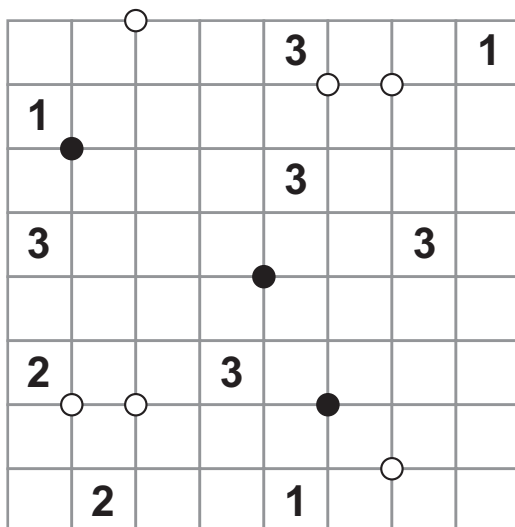
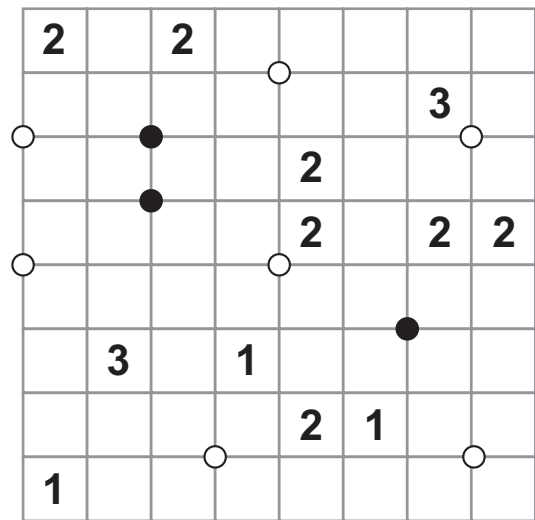
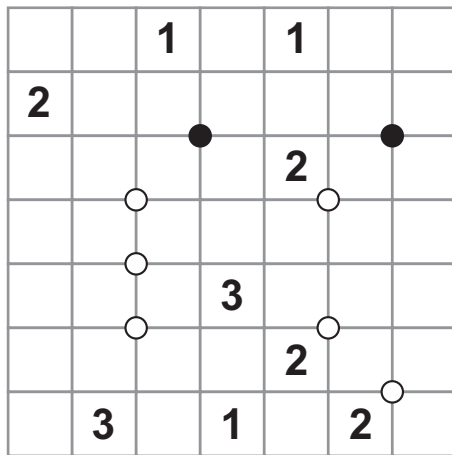
29-32. Masyu-Rundweg

Draw a loop into the diagram following the gridlines, which does not touch or cross itself. A digit in a cell indicate the amount of its edges used by the loop.

The circles in the diagram follow the Masyu-rules: The path must turn at every black circle, but cannot turn immediately before or after. And the path can not turn at any white circle, but must turn immediately before and/or after.

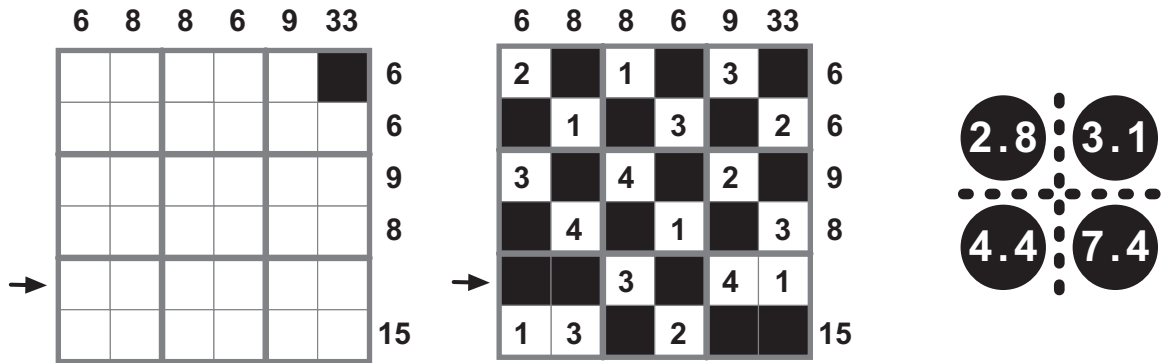


Answer format: Write the sizes of areas outside the loop larger than 1, in increasing order. The answer for the example would be: 2467

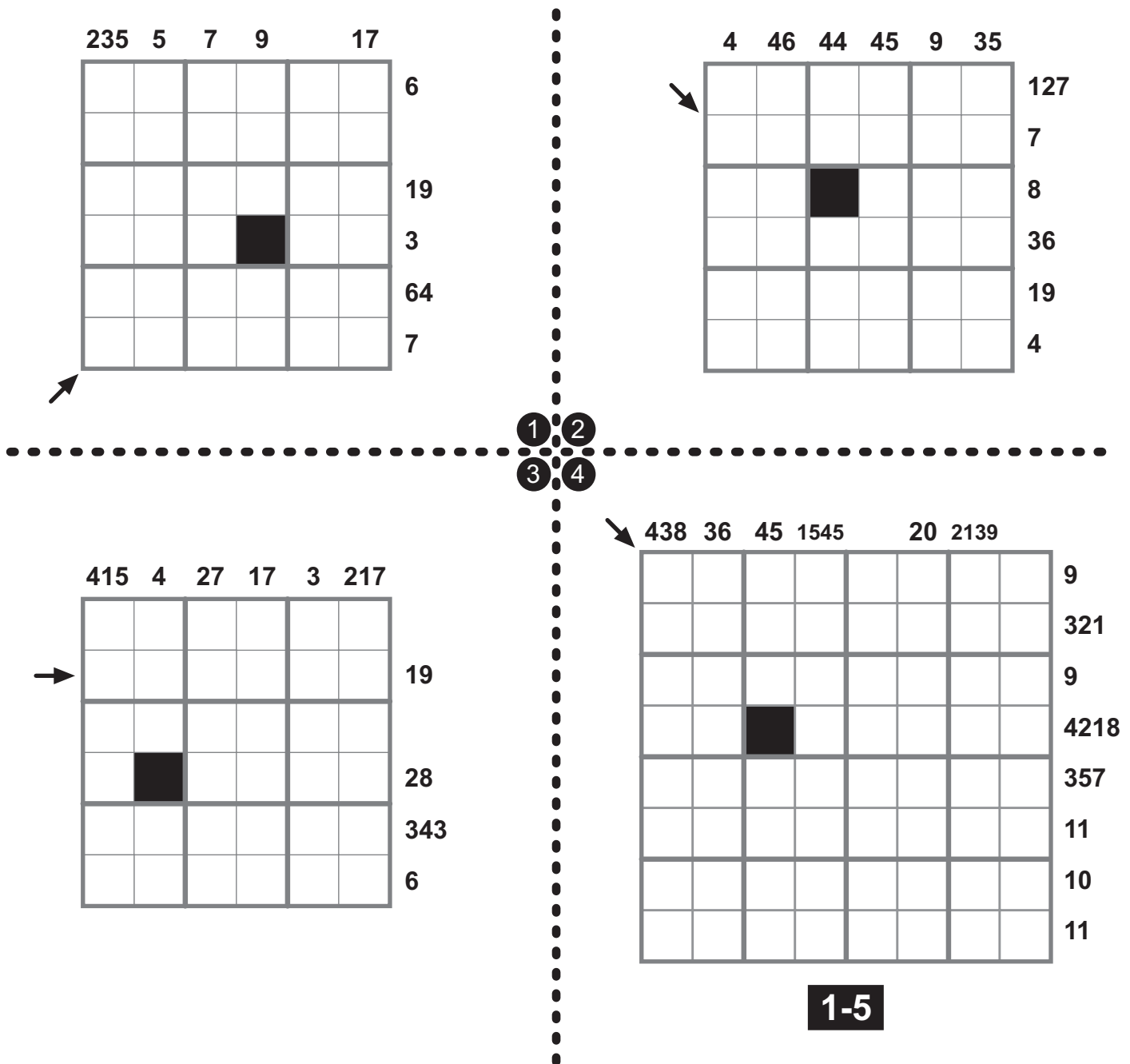


33-36. Sumbox

Fill in the grid with digits 1-4/1-5 (1-4 for the example) and blacken some cells so that there are exactly two digits and two blackened cells in every outlined 2x2 area. No digit can be repeated within a row/column/2x2 area. Numbers outside the grid indicate the total of numbers that can be read in the corresponding direction. Numbers are read either from left to right or from top to bottom.

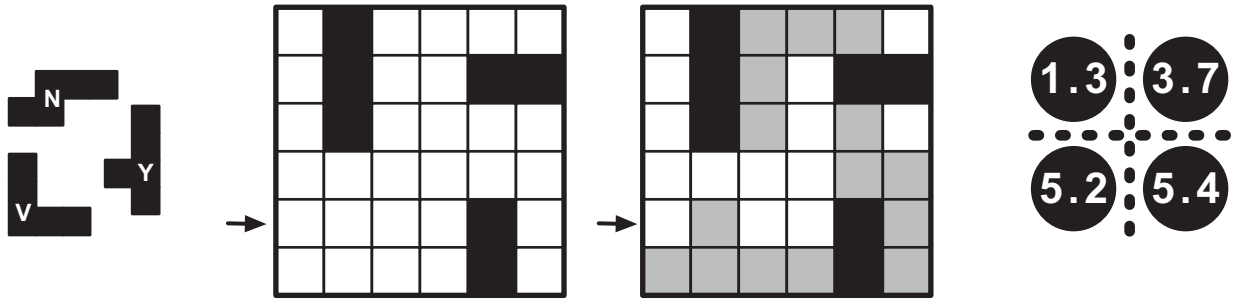


Answer format: Write the content of the marked row/column. Use 0 for blackened cells. The answer for the example would be: 003041

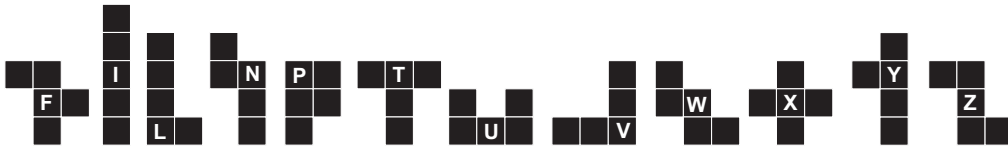


37-40. Pentoroll

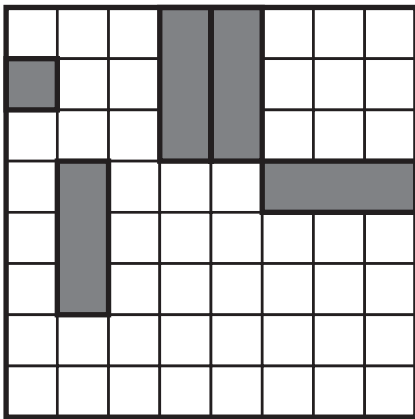
Given figures are built from 5 unit cubes (in view from the top they give standard pentomino set). The figures were placed into the grid without mirroring (rotation is allowed). Figures cannot touch each other even at a corner. Then each figure was rolled over one edge. A top view after rolling is given. Find the initial figure's locations.



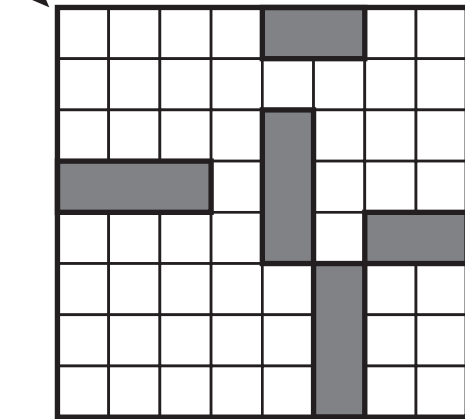
Answer format: Write the content of the marked row/column. Use the corresponding letters for the pentominoes and 0 for the rest. The answer for the example would be: 0Y000N



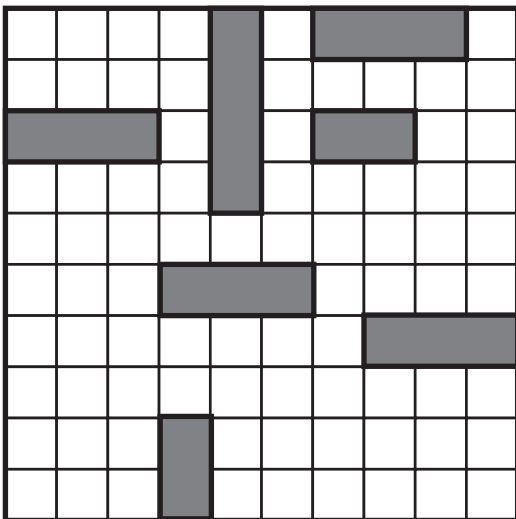
F, I, V, W, X



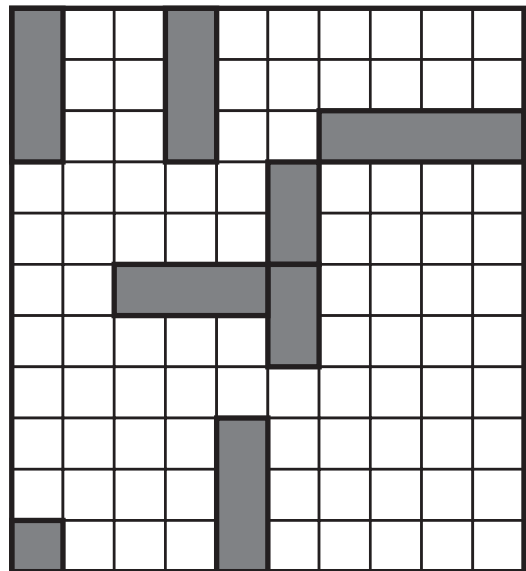
L, N, P, T, V



F, N, P, V, X, Y, Z



I, L, N, P, V, W, X, Y



41. Looptimizer

Fill the grid with digits 1-9 so that no digit is repeated within a row/column. Each pair of consecutive neighbours should have a line between them, forming a closed loop. All lines should be part of the loop. Some cells may be blackened if you cannot place any number following the rule above. This cells may have loop lines if necessary.

Maximize the amount of corners in the loop, using minimum amount of blackened cells.

Scoring:

(amount of corners / 3) - (amount of blackened cells x 0.7)

Scoring for the example:

(24 / 3) - (3 x 0.7) = 5.9 points

		8		

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

Answer format: Write the content of every row, from left to right, top to bottom. Use 0 for the blackened cells. The answer for the example would be: 85210,06783,60854,73568,32179

	2				5
			1		
	8				3



Some puzzle ideas are obtained as follows:

Diagramless Kakuro from Thomas Snyder

Knapp Daneben Tapa from Florian Kirch (Rätsel Portal LM Deutschland).

Abacus Snake from ZeKa 2007 (Croatia)

Masyu-Rundweg from Nils Miehe (Rätsel Portal LM Deutschland).

Pentoroll from Riad Khanmagomedov