

1-4. Previously On OAPC

1-2: Sigma Snake: Draw a snake of letters in the grid, whose head and tail are given in circles and that doesn't touch itself, not even diagonally. Avoid grey cells with numbers. The snake must be formed only of numbers (as written in the given word list) in any order. A number on a grey cell gives the total of the adjacent (even at a point) numbers that are in the snake. You don't need to use all the words but you can use each word only once.

3-4: Tapa: 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. There are no wall segments on cells containing numbers.

ONE
TWO
THREE
FOUR
FIVE

○	T	7	
			I
		9	
○	4		

ONE
TWO
THREE
FOUR
FIVE

○	W	T	7	
		E	V	I
		9		F
	N	E	T	E
○	4	H	R	E

→

2			1 ₃
	2 ₂		2

→

2			1 ₃
	2 ₂		2

→

6.7	7.9
4.0	8.1

Answer format:

1-2: Write all the numbers from the head to the tail. The answer for the example would be: 1352

3-4: Write the content of the marked row/column. Use B for blackened cells and W for white cells. The answer for the example would be: BBBWB

ONE
TWO
THREE
FOUR
FIVE
SIX
SEVEN
EIGHT
NINE

				9	ⓔ
	I			O	
		23			7
			E		
	S			9	ⓓ

ONE
TWO
THREE
FOUR
FIVE
SIX
SEVEN
EIGHT
NINE

			4		
		H			
			O		
		13			19
	I			ⓓ	
					Ⓝ

1	2
3	4

ONE
TWO
THREE
FOUR
FIVE
SIX
SEVEN
EIGHT
NINE

1		1 ₂				1 ₂
				2 ₂		
		1 ₁ 1				2 ₃
	2 ₂				1 ₁ 1	
			1 ₁			
1				1 ₃		1

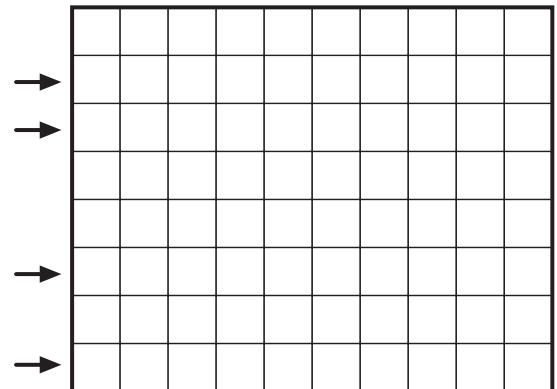
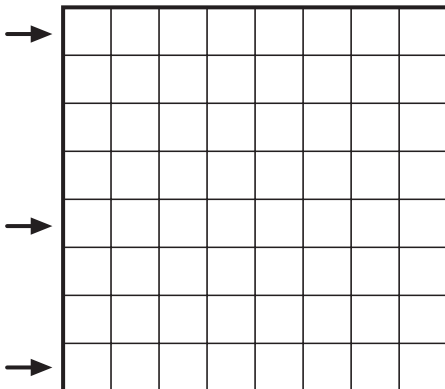
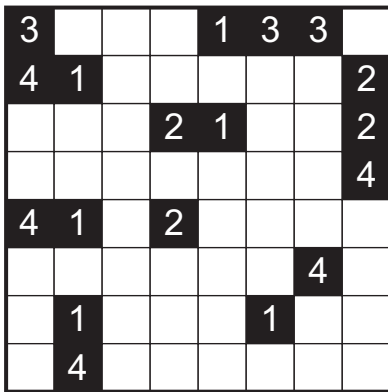
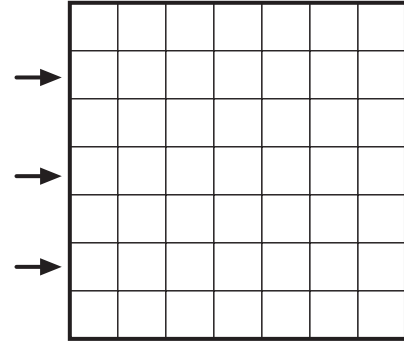
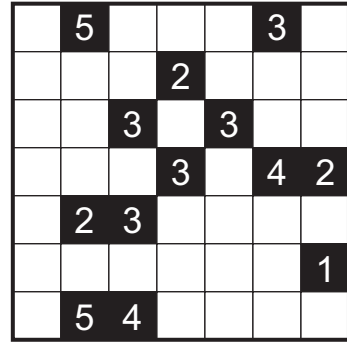
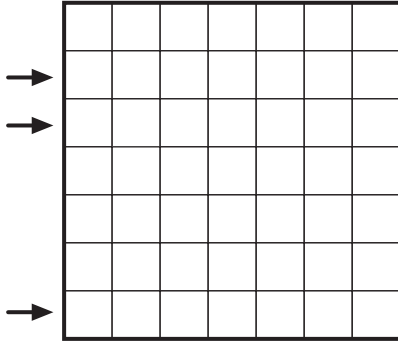
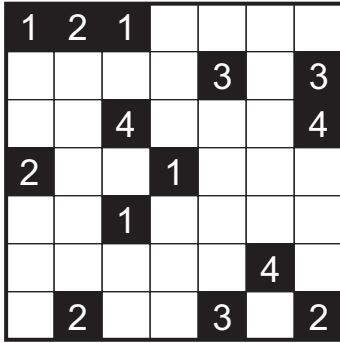
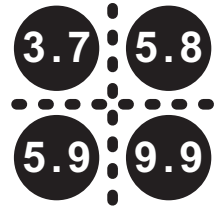
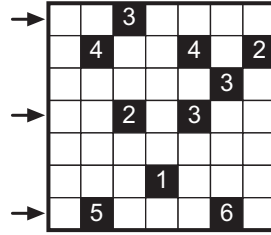
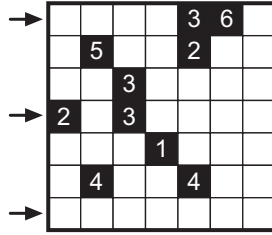
ONE
TWO
THREE
FOUR
FIVE
SIX
SEVEN
EIGHT
NINE

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

5-8. Hamle

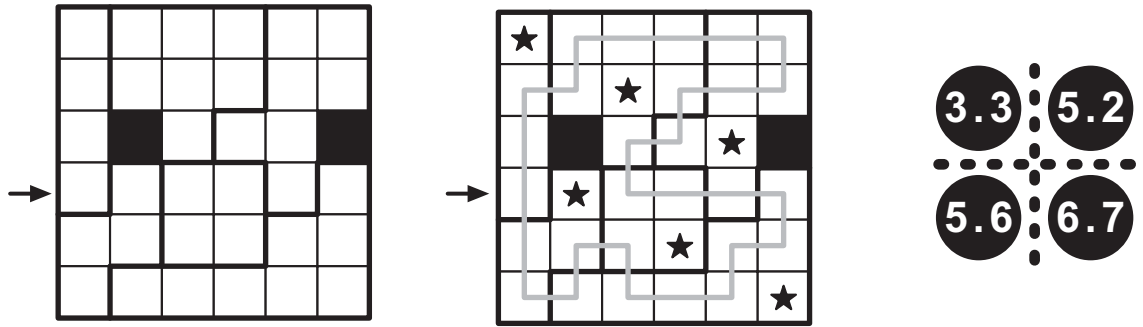
Move every black square in one of the four directions, so that numbers in the black cells indicate the length of their moves. When all moves are done, all white cells should be interconnected and black cells should not touch each other from the sides.

Answer format: Write the content of the marked rows, top left to bottom right, row by row. The answer for the example would be: 3,23,56

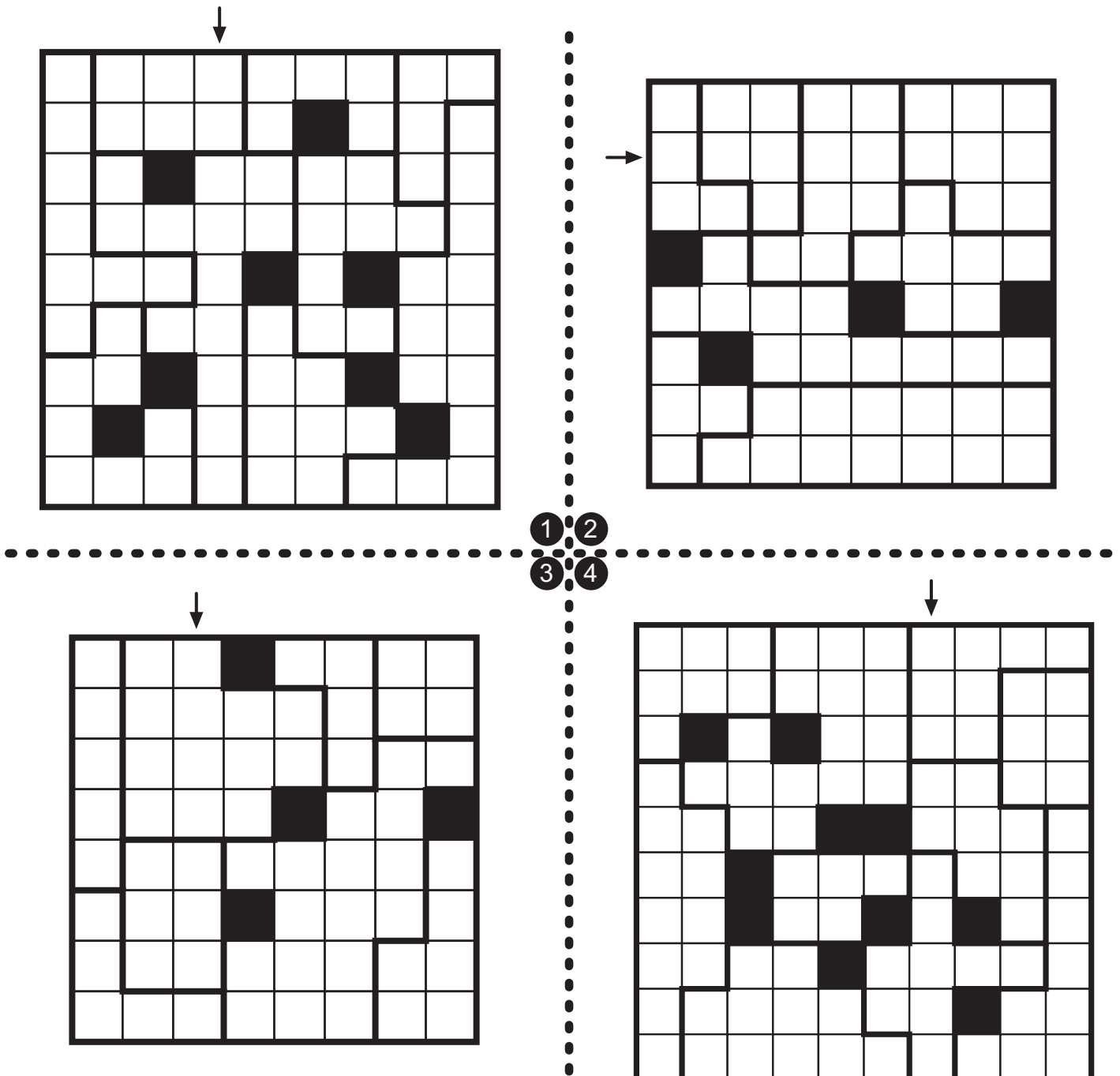


9-12. Comet

Place some stars in the grid so that there is exactly one star in every row, column and outlined region. Stars cannot touch each other, not even diagonally. Additionally, all remaining cells must be traversed by a single closed loop. There are no stars or loop segments on black cells.



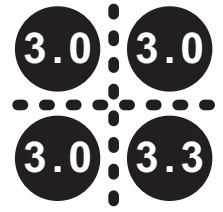
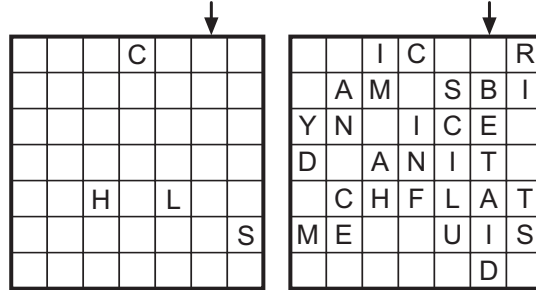
Answer format: For each row, write the column number containing the star. Then write the length of the horizontal loop segment in the marked row. The answer for the example would be: 135246,3



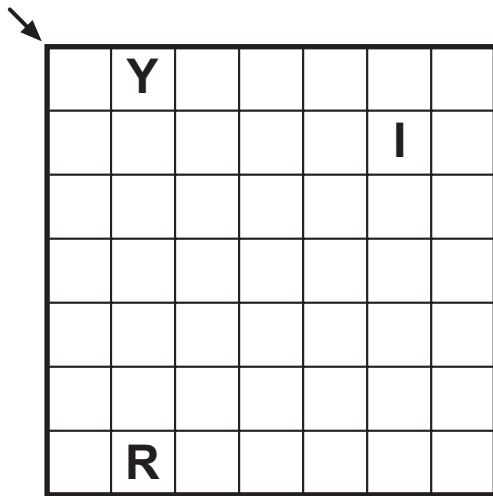
13-16. Word Stairs

Place all given words in the diagram so that no letter is repeated within a row/column. All words should be placed like stairs (e.g. up-left-up-left). Words can cross or overlap each other. Some letters are already given.

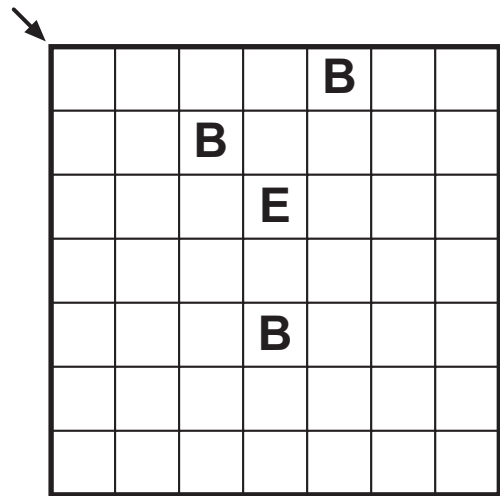
FLUID
MECHANICS
DYNAMIC
STATIC
CEBIR



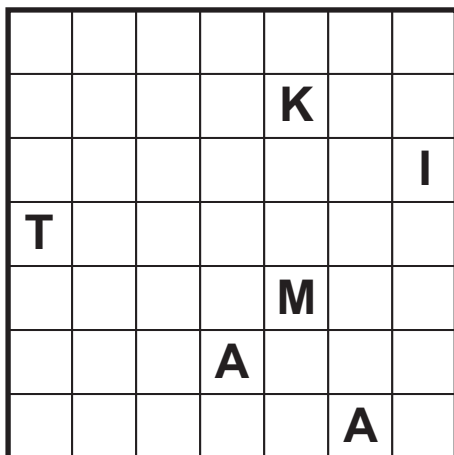
Answer format: Write the content of the marked row/column. Use - for empty cells. The answer for the example would be: -BETAID



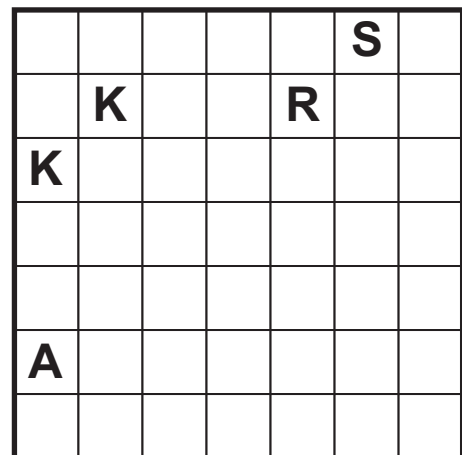
GALATASARAY
TRABZON
SIVAS
KONYA



KARNIBAHAR
BEZELYE
BAMYA
ARMUT



PLASTIK
TERAZI
ASTAR
DEMİR
MOLOZ
TAHTA



KAHVERENGI
KIRMIZI
BEYAZ
SIYAH
SARI



17-20. 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.

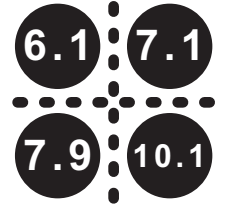
Clues given next to the grid indicate the sums that are formed in the grid. For the row clues, this means all clues in the first row (from left to right) are listed before clues in the second row, and so on. For the column clues, all sums that have their uppermost cell in the first row (from left to 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 blackened cells. The answer for the example would be: 1620473

Across :
8,6,7,21,7,7,10,11,
8,12,15,9,16,4

Down:
3,28,9,9,28,4,8,
8,9,14,11,10

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



(1-6)

Across:
10,21,7,9,9,5,21,3

Down:
8,9,18,10,17,11,4,8

(1-7)

Across:
13,14,6,18,4,3,28,12,11,7,9,18,3

Down:
12,14,18,10,12,15,18,20,11,7,9

(1-7)

Across:
3,7,6,17,25,15,18,11,14,7,9

Down:
4,6,22,13,5,24,14,12,16,8,8

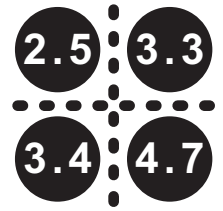
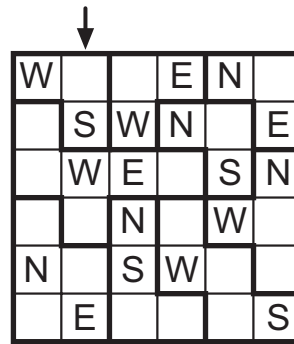
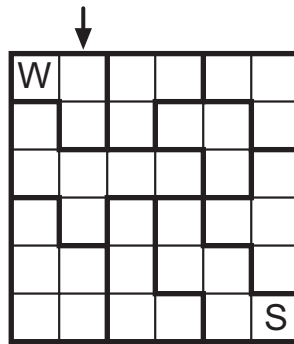
(1-9)

Across:
34,17,37,12,9,14,16,5,10,10,15,43,3,15

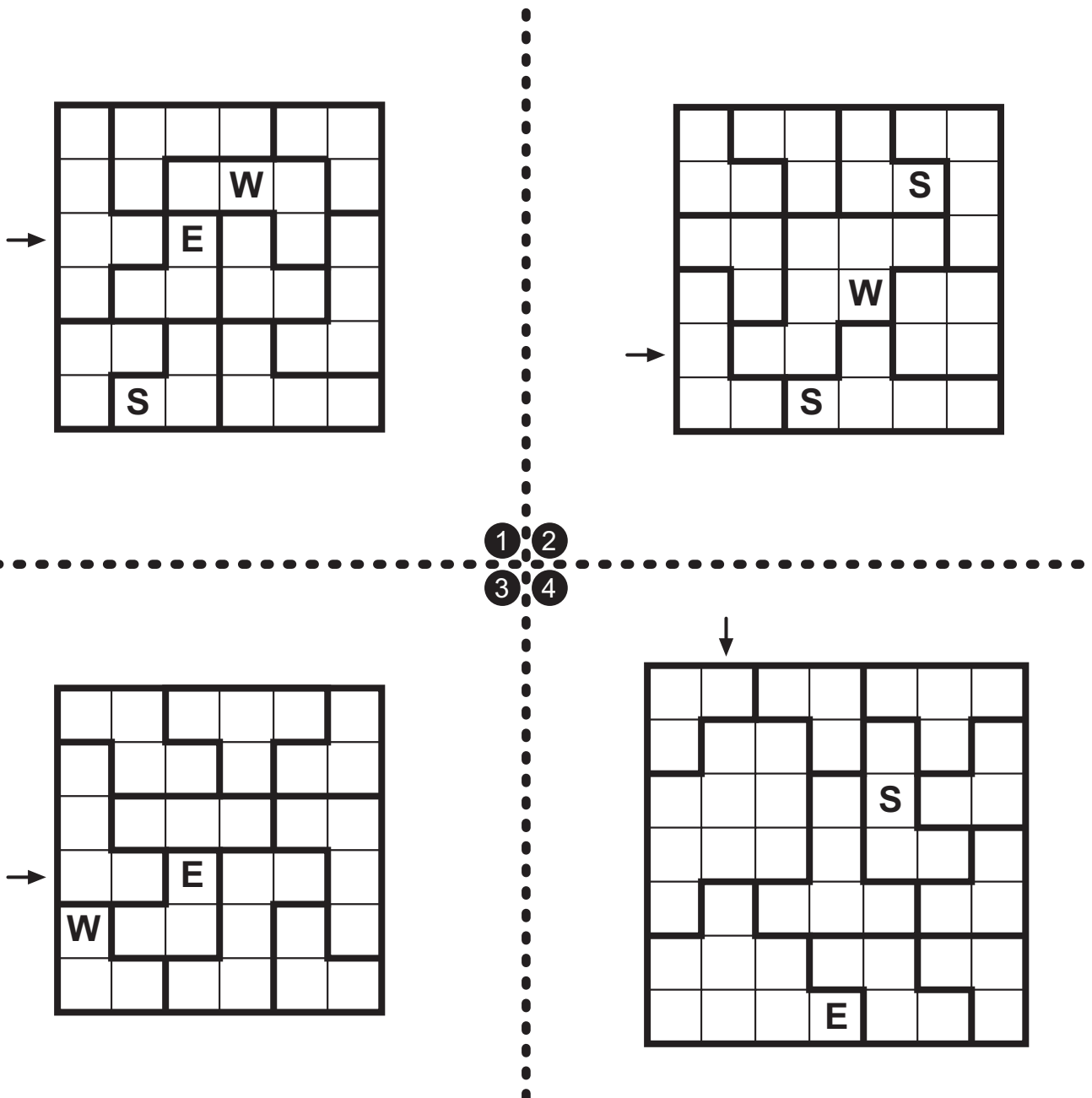
Down:
6,41,23,9,14,40,9,13,9,17,12,14,11,6,12,4

21-24. NEWS

Place the given directions in the grid so that each region contains exactly two directions. Directions in one region should satisfy their positions to each other. No direction can be repeated within a row or column.



Answer format: Write the content of the marked row/column. Use - for empty cells. The answer for the example would be: -SW--E



25-28. Four Squares

The four puzzle types: Skyscrapers, Battleships, Tents and Snake all rely on clue numbers around the outside of the grids. Find the missing clues that are shared between the grids so that all four puzzles can be solved.

Skyscrapers: Place digits 1-6 into the grid so that each digit appears exactly once in each row and column, and so that the clue numbers are the number of buildings that can be seen from the corresponding direction.

Battleships: Place the given fleet into the grid so that ships do not touch each other, not even diagonally. The clue numbers are the number of ship segments in the corresponding direction.

Tents: Locate the tents in the grid. Trees and tents appear in distinct pairs, in horizontally or vertically adjacent squares. Tents do not touch each other, not even diagonally. The clue numbers are the total number of the tents in the corresponding direction.

Snake: Find a path of sequentially numbered and edge-connected squares starting from 1, passing through 17 and 24, and ending at 30 (1-12 for the example). The path cannot loop back to touch itself, not even diagonally. The clue numbers are the number of times the snake makes a 90-degree turn in the corresponding direction.

Answer format: Write the row of missing clue numbers, followed by the column of missing clue numbers. The answer for the example would be: 2121202, 21220201

		1	3	2						
1	3	1	2	2	■	■				
3	1	2	3	1					■	
2	2	3	1	2		●			■	
	2	1	2		■		1	2	0	2

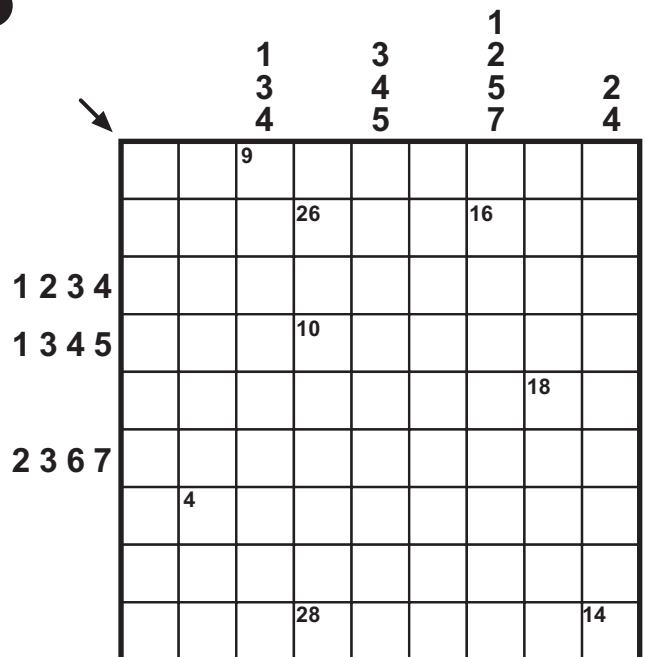
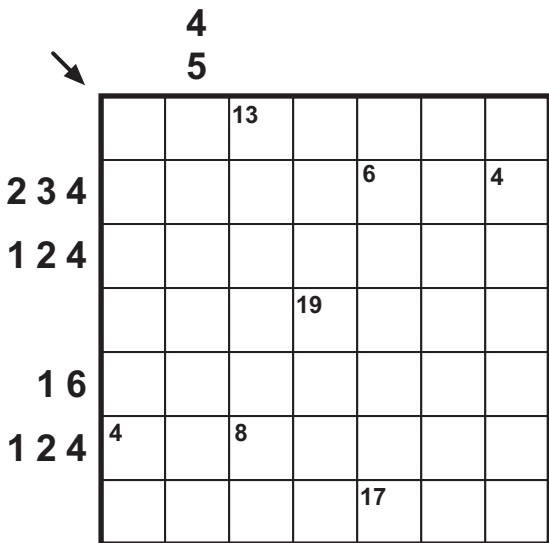
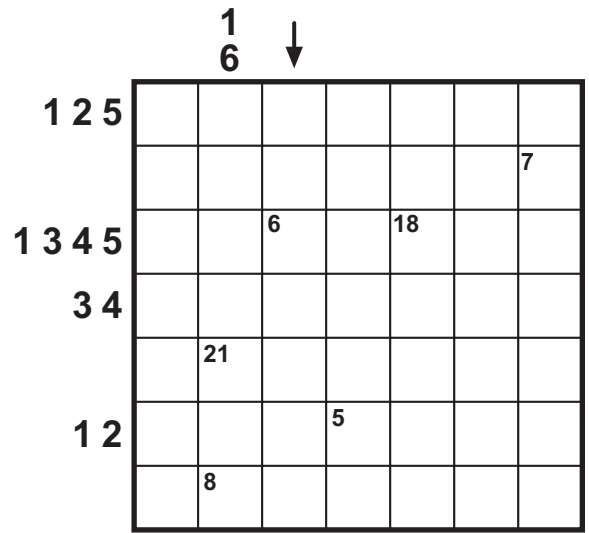
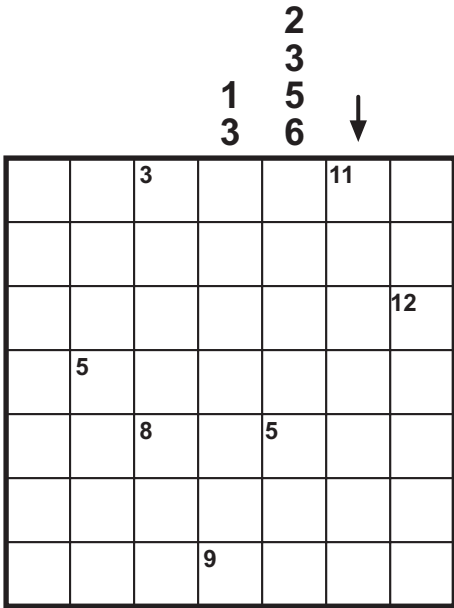
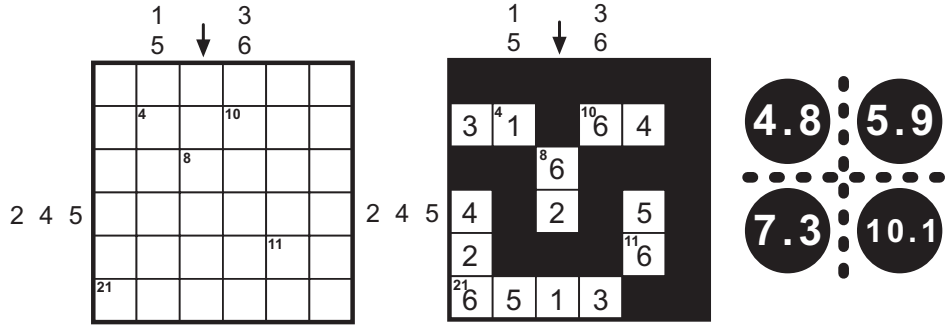
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■

		3	2	1	4	3	2			
3							2			
2					1				■	
2				5						
2			3							
1		2								■
4	1									
							1/2			
							3/4			
■				■						
	■				■					
				■	■					17
■							30		1	
				■						
		■						24		
			■		■					
	■									

29-32. Sum Islands

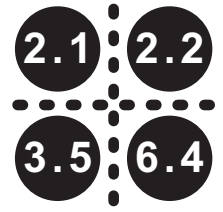
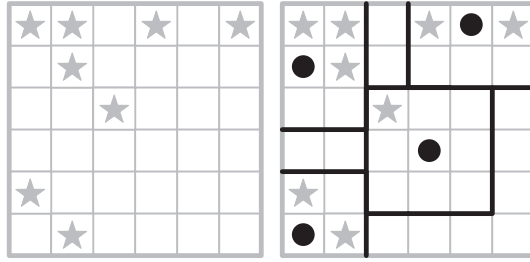
- The numbers in the diagram represent the sum of the cells in a region. Determine the regions and use digits 1-6/1-7 (1-6 for the example) so that no digit is repeated within any row, column and region. All sums are given and are formed of at least two digits.
- All regions should be separated from each other with a continuous wall, which cannot form any 2x2 areas and occupies every cell not used by the regions.
- The digits outside the grid indicate the digits in the corresponding direction, in increasing order.

Answer format: Write the content of the marked row/column. Use 0 for blackened cells. The answer for the example would be: 006201

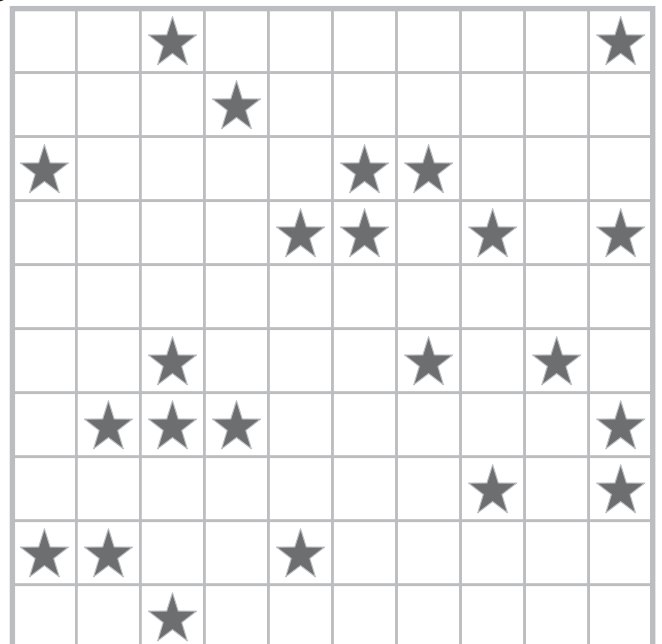
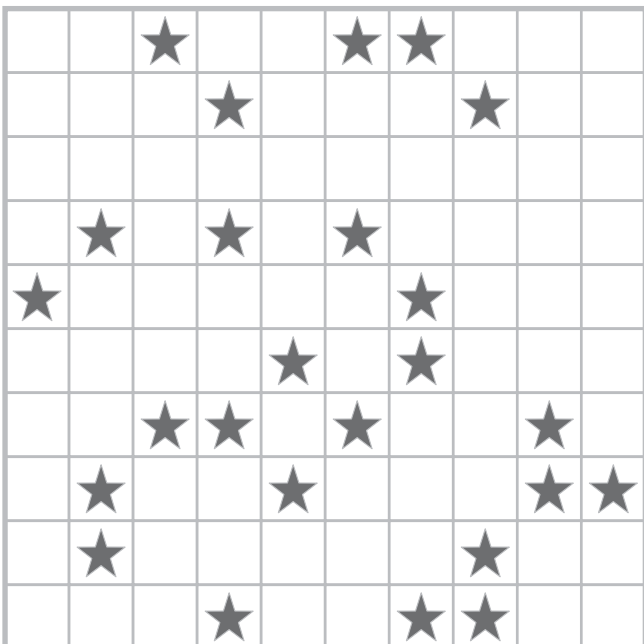
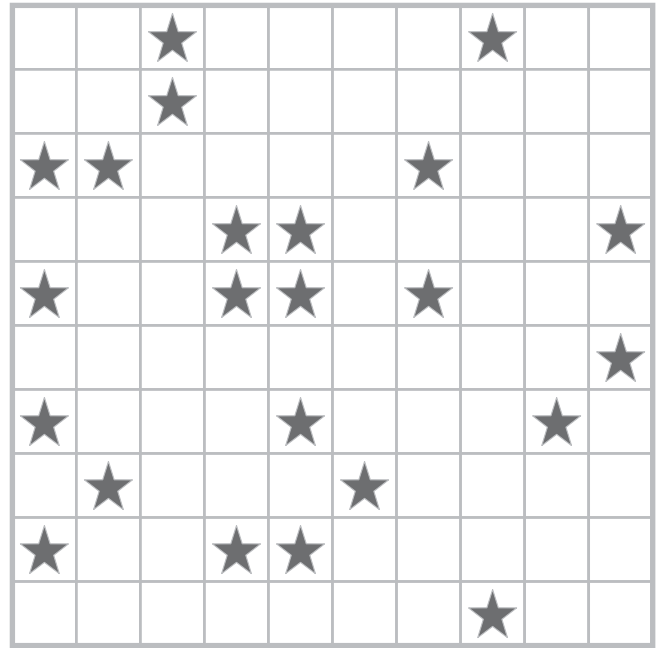
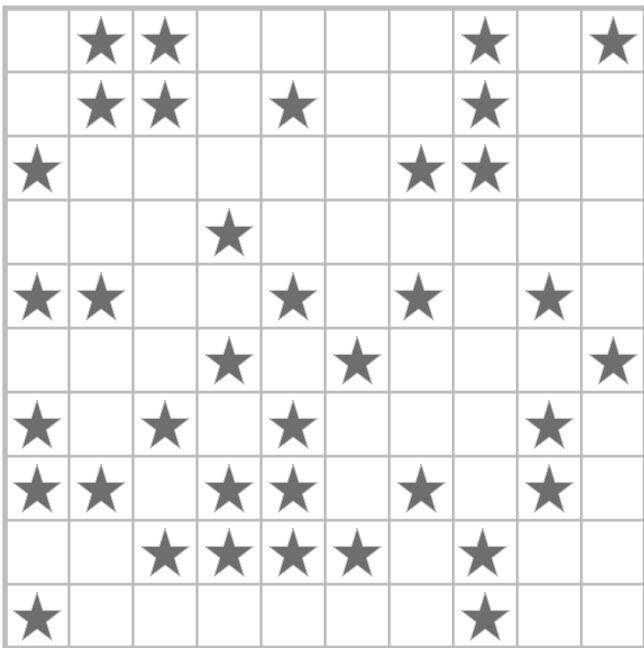


33-36. Stardust

Locate some squares (each having the size 3x3) in the grid so that all stars are surrounded by squares. Some cells of the squares can be outside the grid, but the central cell should always be inside the grid. Squares cannot overlap each other, but they can share edges. There shouldn't remain any star which is not surrounded by a square. Central cells of squares cannot overlap the stars.



Answer format: Write the sizes of areas not occupied by any square, in increasing order. The answer for the example would be: 2,2,7



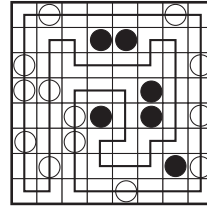
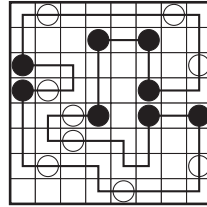
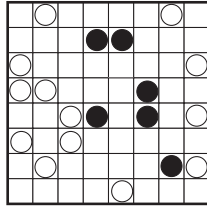
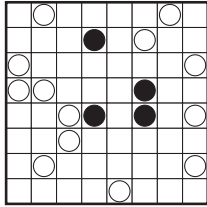
37-40. Black Or White*

"Not every white is as white as it seems." - Cevdet İnanç

Two of the puzzles are Masyu and two of them are Loop puzzles. You need to determine the types for solving.

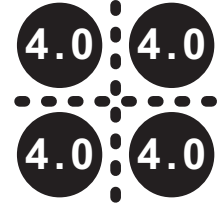
Masyu: Moving between edge-to-edge neighbouring cells, draw a closed path that passes through every circle and doesn't cross itself. The path must turn at every black circle, but can not turn immediately before or after. And the path can not turn at any white circle, but must turn immediately before and/or after. Some white circles may be painted, becoming black circles.

Loop: Draw a closed loop in the grid, passing through every cell, avoiding black circles. The loop goes straight in white circles.

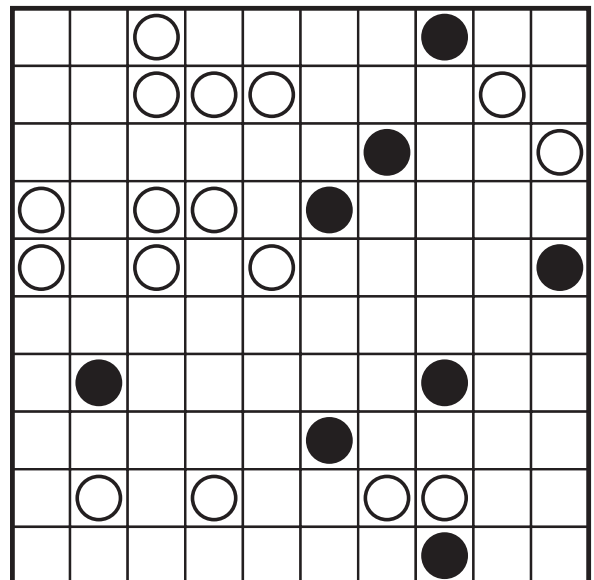
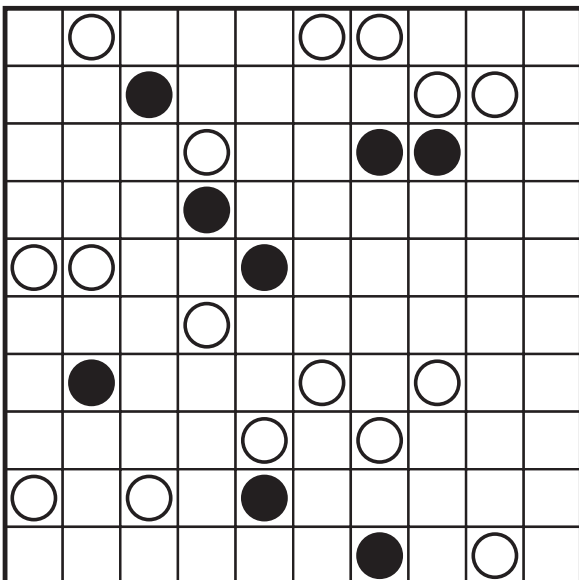
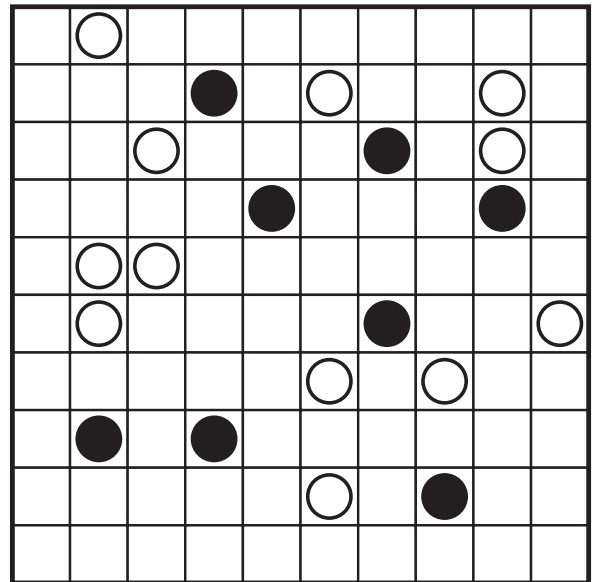
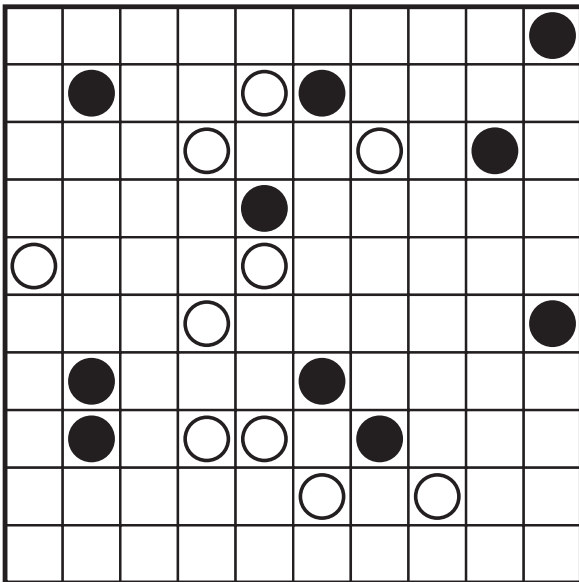


Masyu

Loop



Answer format: For Masyu, write the sizes of empty cell blocks in increasing order. The answer for the example would be: 22233. For Loop, write the number of corners in the loop. The answer for the example would be: 20



41. Go West!**

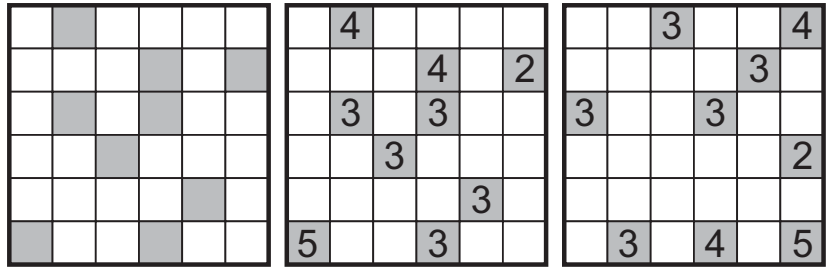
Write some numbers into the grey cells and move every grey cell in one of the four directions so that the numbers you wrote indicate the length of their moves. When all moves are done, all white cells should be interconnected and grey cells should not touch each other from the sides. Each direction has a score to be multiplied by the number written into the cell. Maximize the total of all products.

Scoring:

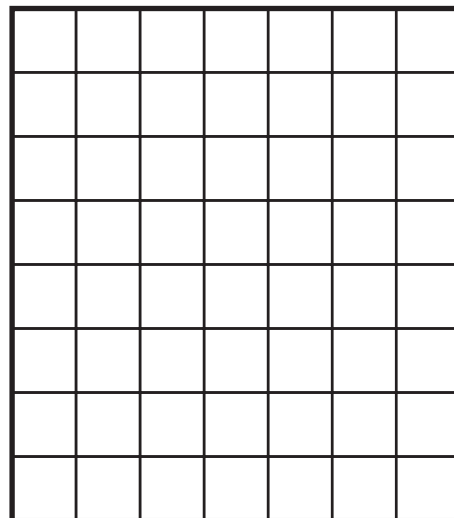
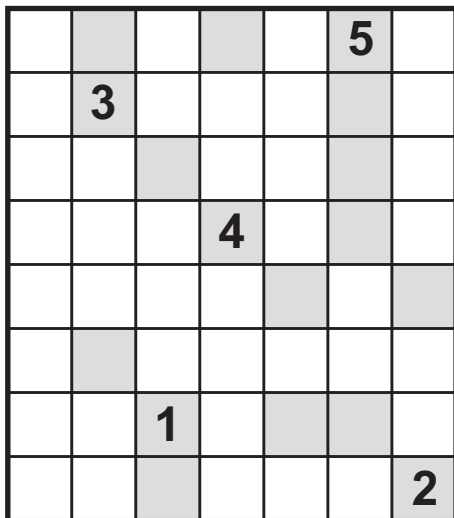
North:0,25 South: 0,15 West: 0,1 East: 0,4

Scoring for the example:

$$(4 \times 0.4) + (4 \times 0.15) + (2 \times 0.15) + (3 \times 0.15) + (3 \times 0.1) + (3 \times 0.25) + (3 \times 0.25) + (5 \times 0.4) + (3 \times 0.25) = 7.5 \text{ points}$$



Answer format: Write all the numbers before movings, from top left to bottom right, followed by their moving direction (N,S,W or E). The answer for the example would be: 4E,4S,2S,3S,3W,3N,3N,5E,3N



Some puzzle ideas are obtained as follows: Diagramless Kakuro from Thomas Snyder, NEWS and Stardust from JPC, Four Squares from Aziz Ateş.
 * Famous song by Michael Jackson (Rest In Peace)
 ** Famous song by Pet Shop Boys