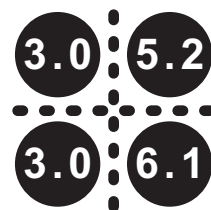
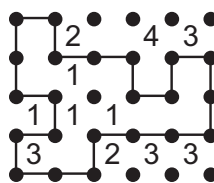
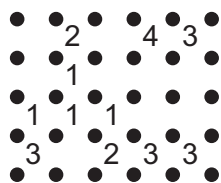
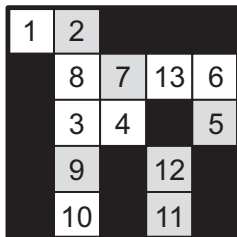
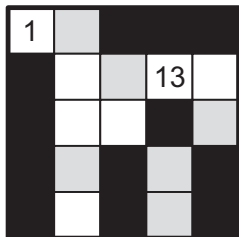


1-4. Previously On OAPC

1-2: Step By Step: Starting with 1, fill the grid with numbers 1-45 (1-13 for the example), jumping between the squares in any of the four directions. If you are on an odd number, you must jump one cell away (one of the neighbouring cells). If you are on an even number, you must jump two cells away. You should follow the route 1,2,3,...,45.

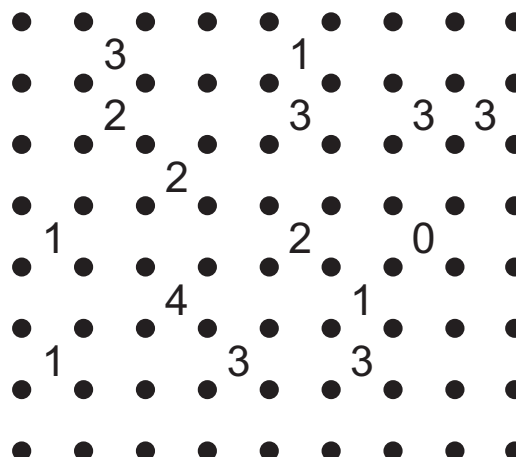
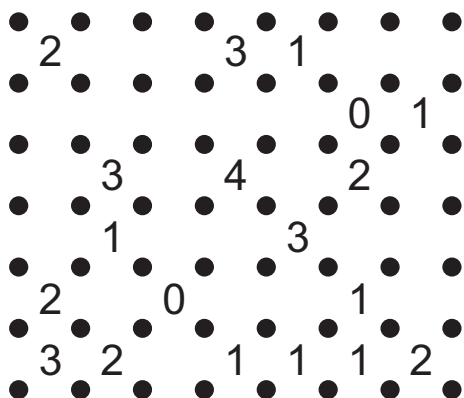
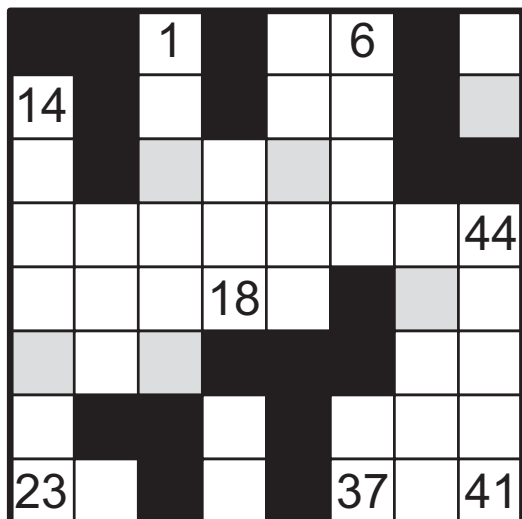
3-4: Polygraph: Draw a single continuous loop by connecting neighbouring dots horizontally or vertically. The clues inside the loop indicate the number of its edges used by the loop. The clues outside the loop indicate the number of its edges not used by the loop.



Answer format:

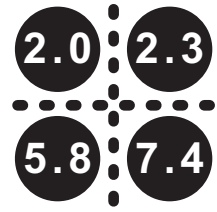
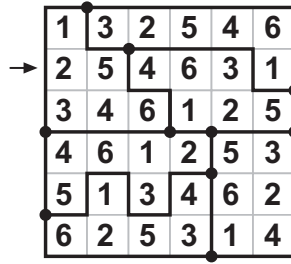
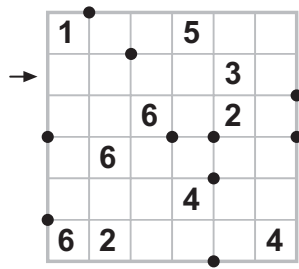
1-2: Write the content of grey cells, from top left to bottom right, row by row. The answer for the example would be: 2,7,5,9,12,11

3-4: Write the total of numbers inside the loop. The answer for the example would be: 6

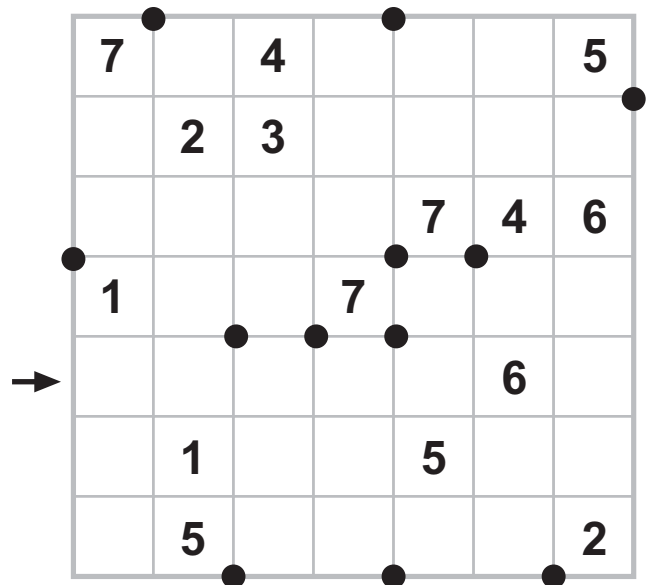
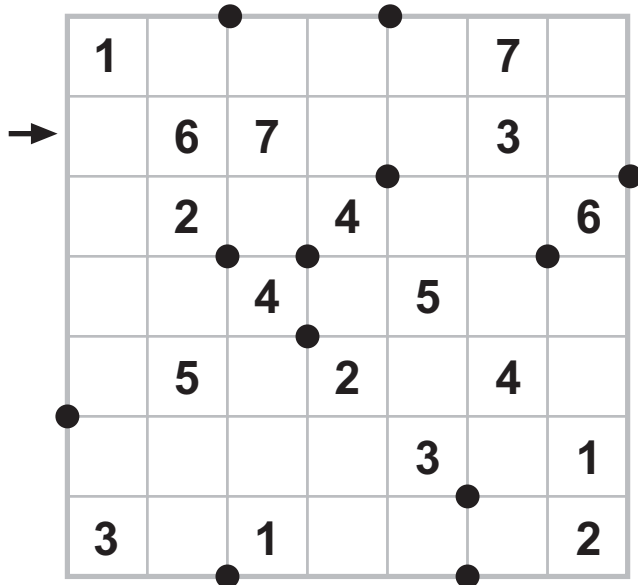
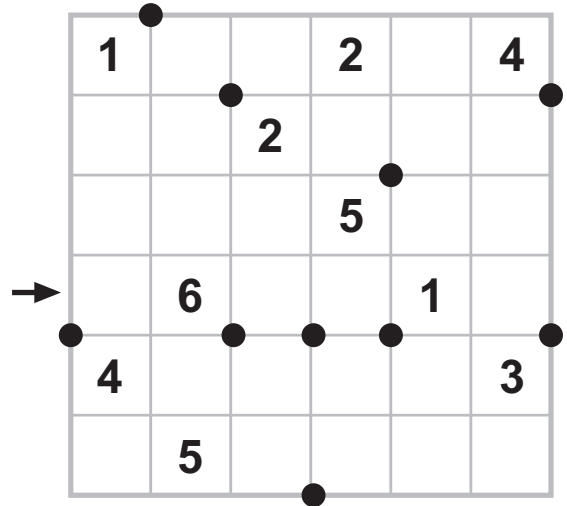
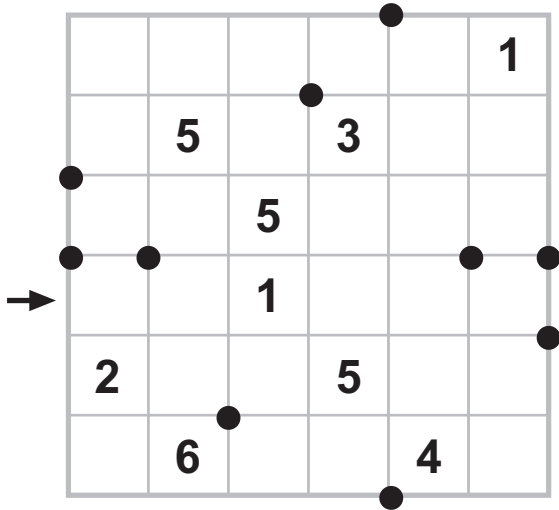


5-8. Tripod Sudoku

Fill the grid with digits 1-6/1-7 (1-6 for the example) and divide the grid into some regions, so that each digit appears exactly once in every row, column and region. All points where three lines meet are given. There are no points where four lines meet.

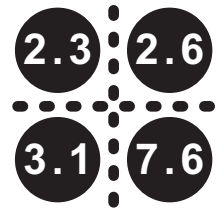
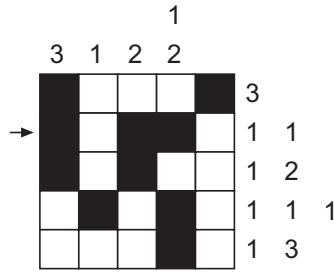
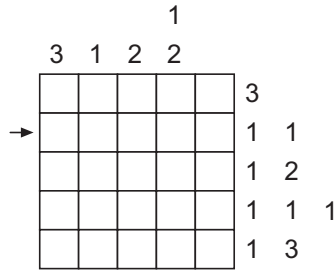


Answer format: Write the content of the marked row/column. The answer for the example would be: 254631



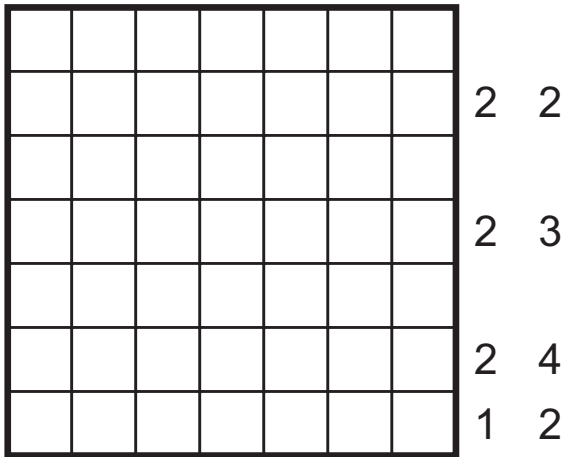
9-12. Akköy

Paint some cells black so that unpainted cells form at least two areas of the same size. Areas should be formed of edge-to-edge neighbouring cells and they can touch each other only diagonally. Numbers at the top indicate the amount of black cell blocks in the corresponding column. Numbers at the right indicate the amount of white cell blocks in the corresponding row. Given clues are in increasing order.

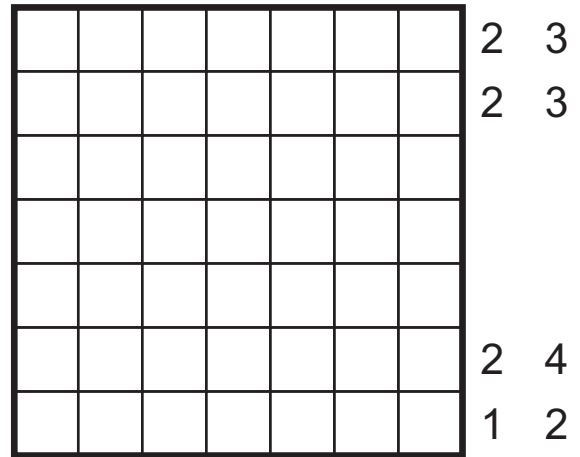


Answer format: Write the size of area, followed by the content of the marked row/column. Use B for black cells and W for white cells. The answer for the example would be: 5BWBBW

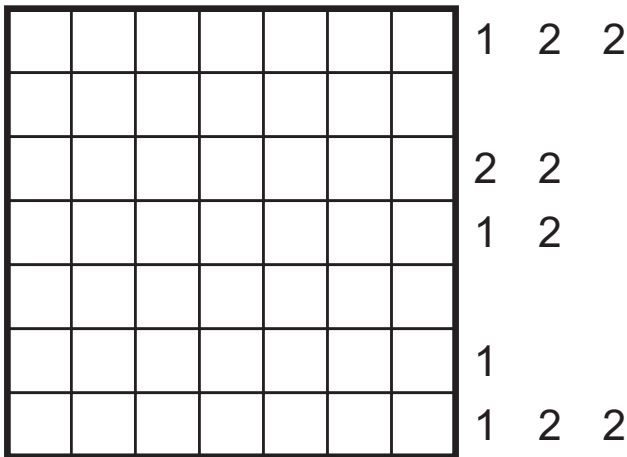
1 1 1
 1 1 3 2 1 1
 2 1 3 2 1 1



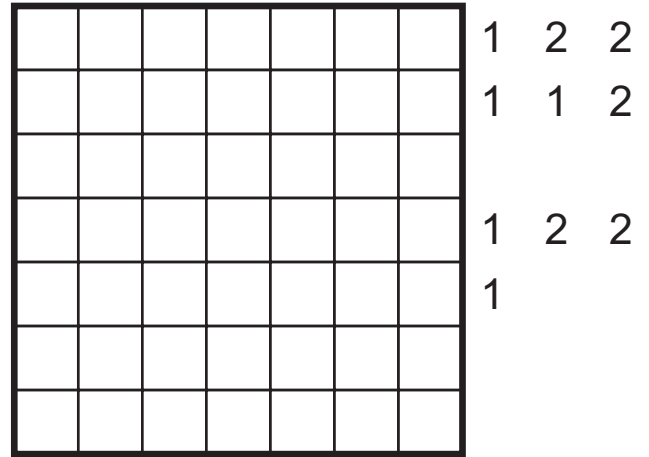
1 1
 2 1 1 1 1
 2 1 3 1 2



1 1 2 1
 3 3 3 4



1 1 1 2 1
 2 5 3 2 4 1

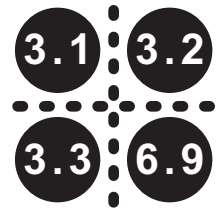


13-16. Psycho Killer*

Fill the grid with digits 1-6 so that each digit appears exactly once in every row and column. The puzzle is a Killer Sudoku puzzle with missing regions. Determine the regions and solve the puzzle. Each region contains its sum in the cell which is the first left cell of the topmost cells. There is no region that contains only one digit. No digit can be repeated within a sum.

11		7		12	
13			14		5
	6				
→	5		10	12	
5	12				5
		9			

¹¹ 3	6	⁷ 1	2	¹² 4	5
¹³ 6	2	4	¹⁴ 5	3	⁵ 1
2	⁶ 1	5	3	6	4
5	⁵ 3	2	¹⁰ 4	¹² 1	6
⁵ 1	¹² 4	3	6	5	⁵ 2
4	5	⁹ 6	1	2	3



Answer format: Write the content of the marked row/column. The answer for the example would be: 532416

↓

6	3	13		8	
		15		6	5
7			7		
10				4	
5	8			10	
	7		12		

→

7	15			7	8
		9	12		
8					7
10				10	
4	12	3			
			14		



→

15		15	6		5
6					
	3		17	9	
	13	5			
				15	
7		10			

↓

5	10	8			15
			11		
7		9			
16			15	4	
	9	9			3
			5		

17-20. Half-life

You are given four different puzzles linked to each other as follows: After solving each puzzle, carry the solution on grey cell blocks to the next one and place it anywhere on the grid. You can rotate this block but cannot mirror it. Do not carry the given clues, you should carry only what you've written or painted. If there is a digit to be carried, it should be carried to an empty cell.

1. 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.

2. Coralfinder: Paint some cells black to find the coral. The coral is formed of edge-to-edge neighbouring cells without any holes and cannot touch itself, not even diagonally. The numbers outside the grid indicate the amount of painted cells in the corresponding row/column, not in order. Painted cells cannot form a 2x2 square.

3. Japanese Sums: Fill the grid with digits 1-7 (1-5 for the example) so that no digit is repeated within a row/column. Numbers outside the grid indicate the sums of the numbers in the corresponding directions, in order. There must be at least one blackened square between the sums.

4. Nurikabe: Create white areas, surrounded with blackened cells which are linked to a continuous wall. The numbers in the grid indicate the size of the corresponding white areas. The wall cannot form any 2x2 square. White areas may touch each other only diagonally.

Answer format:

1, 2, 4: Write the content of the marked row/column. Use B for black cells and W for white cells.

3: Write the content of the marked row/column. Use 0 for blackened cells.

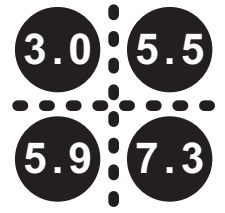
21-24. Magic R

Place the given words into the grid, either horizontally from left to right or vertically from top to bottom, so that they do not touch each other, not even diagonally. The letter "R" must appear exactly once in each row and column. Some letters are already given.

ARM
ART
GAR
IRE
RAD
ROT
TOR
ZAR

		D					
							G
	T						
		M				A	
			T				

R	A	D			I		
					R		G
	T	O	R		E		A
							R
				R			
A	R	M		O		A	
				T		R	
Z	A	R					T



Answer format: Write the initial letters of the all horizontal words from top to bottom, followed by the initial letters of all the vertical words from left to right. The answer for the example would be: RTAZ,RIAG

ARI
ART
IRK
SIR
ASUR
ETER
RENK
ERKEK
RAHIME
RETINA

E							
			E				
	T						
							E
		E					
						K	
	S						

ARC
RAE
REM
TUR
URE
KIRK
ORAK
ROCK
KORUK
MERIH

			I				
							C
		U					
				E			
K							
			O				
							K
	E						



IRK
MAR
ARTI
ERIK
ETER
RAMA
ATARI
GRIMM
KARGA
SARMA

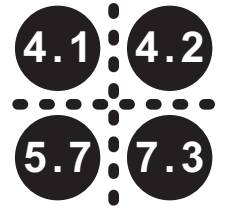
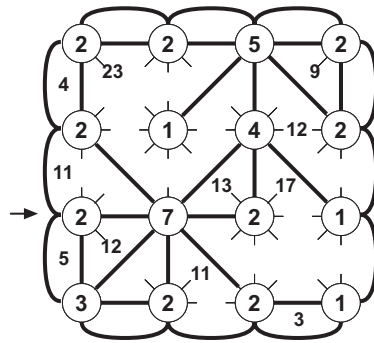
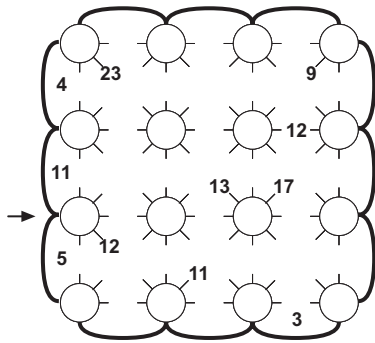
							M
		E		T			
			K				
I							
					A		
M							

ARC
IRK
SIR
TUR
URE
ASUR
ETER
RENK
RUYA
ERKEK

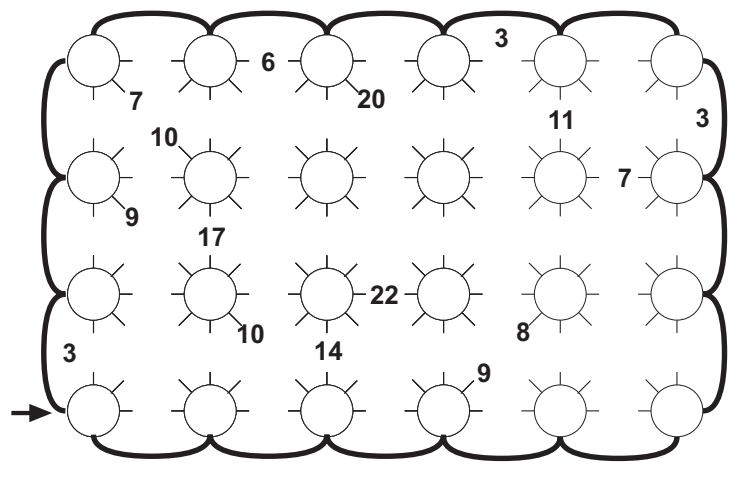
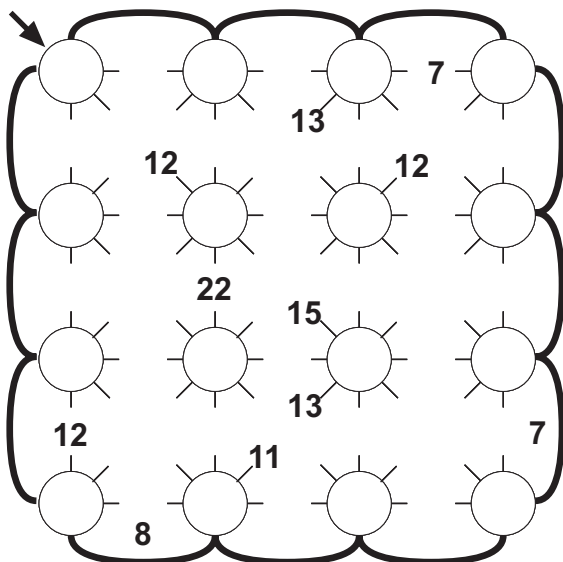
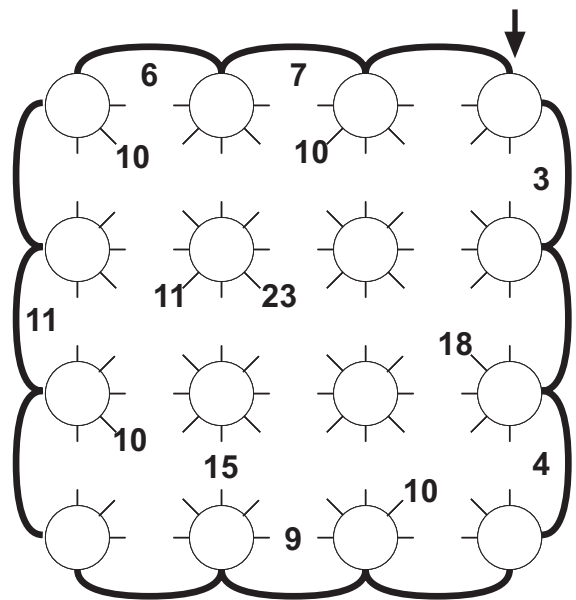
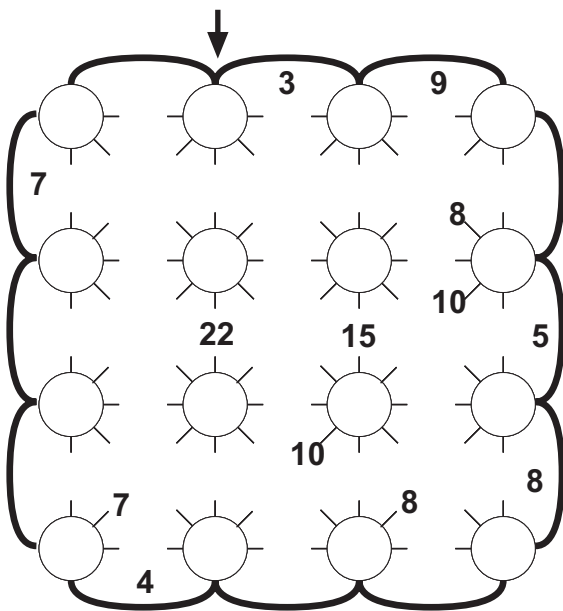
				A			
	U						
		K					E
				S			
T							E
	E						

29-32. Wiring

Connect neighbouring circles with wires (straight lines) going horizontally, vertically or 45-degree diagonally, so that all circles are interconnected. Circles should be filled with digits which show the quantity of wires going from that circle. Wires cannot make turn, cannot intersect circles, numbers on the board and other wires. Each area surrounded by the wires and border lines has not more than one number. This number shows the sum of digits in the circles which adjoin to the area.

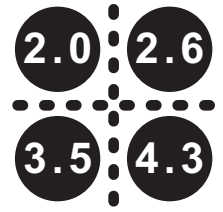
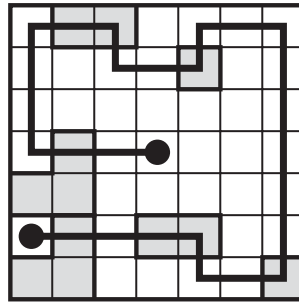
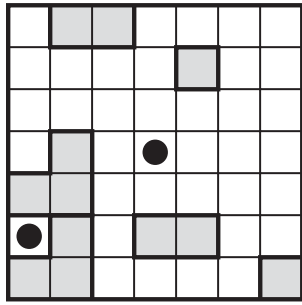


Answer format: Write the content of the marked line. The answer for the example would be: 2721

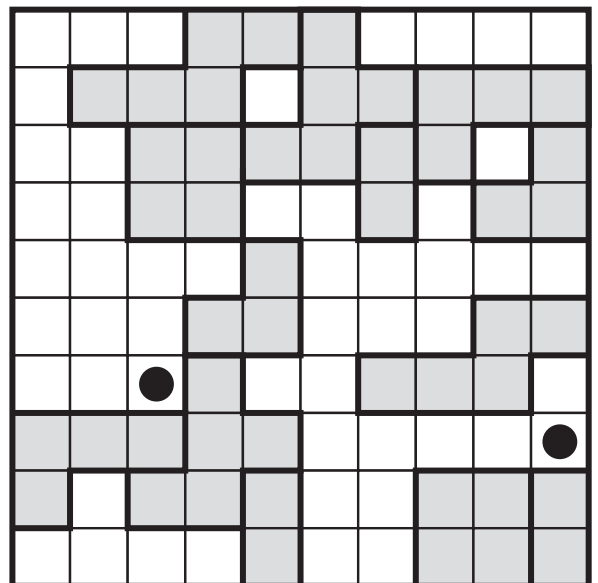
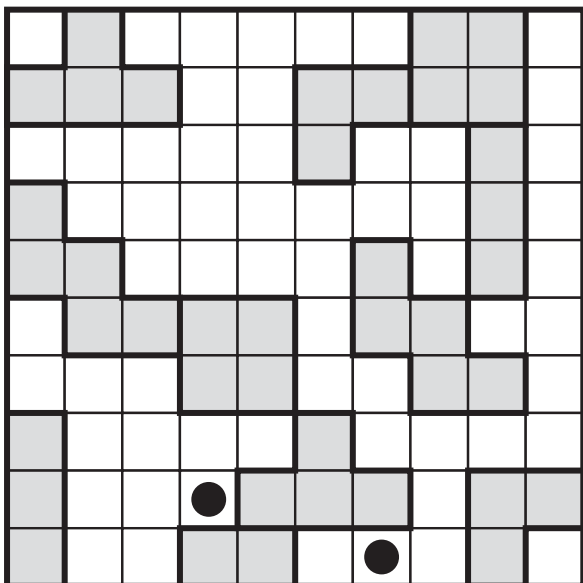
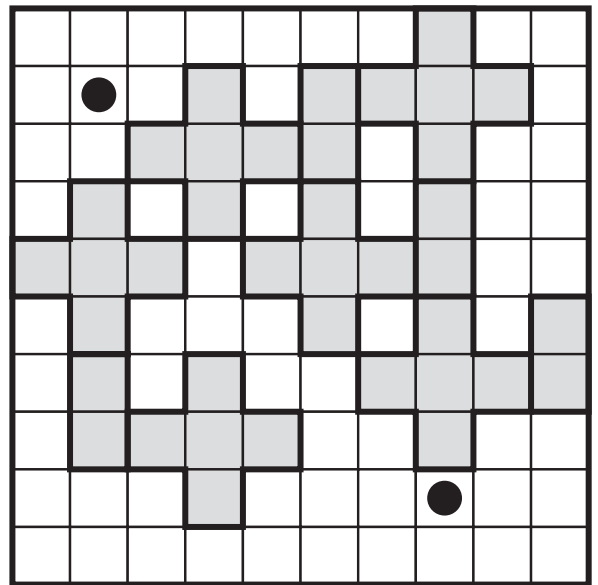
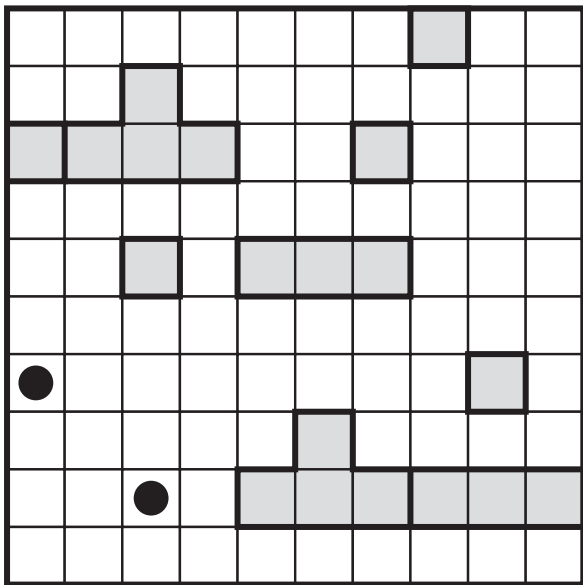


33-36. The Persistence Of Memory**

Locate a snake in the grid, that travels horizontally and vertically, without touching itself even at a point. All regions contain parts of the snake. The regions having the same shape should have the same appearance, without any rotations. The head and tail of the snake are given.



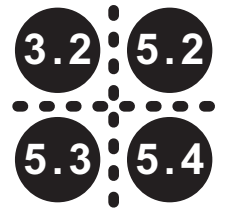
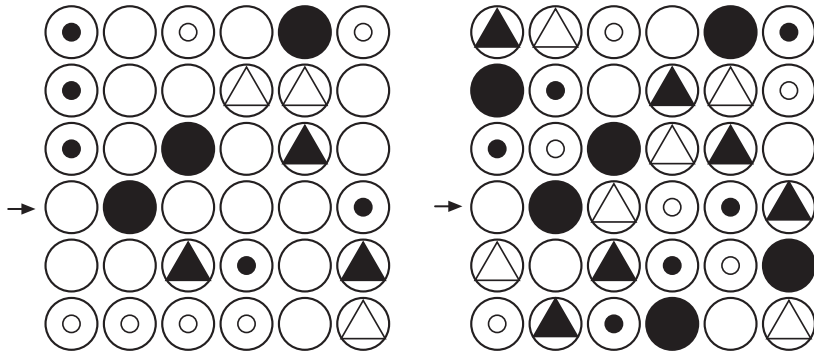
Answer format: Write the number of turns in the snake. The answer for the example would be: 10



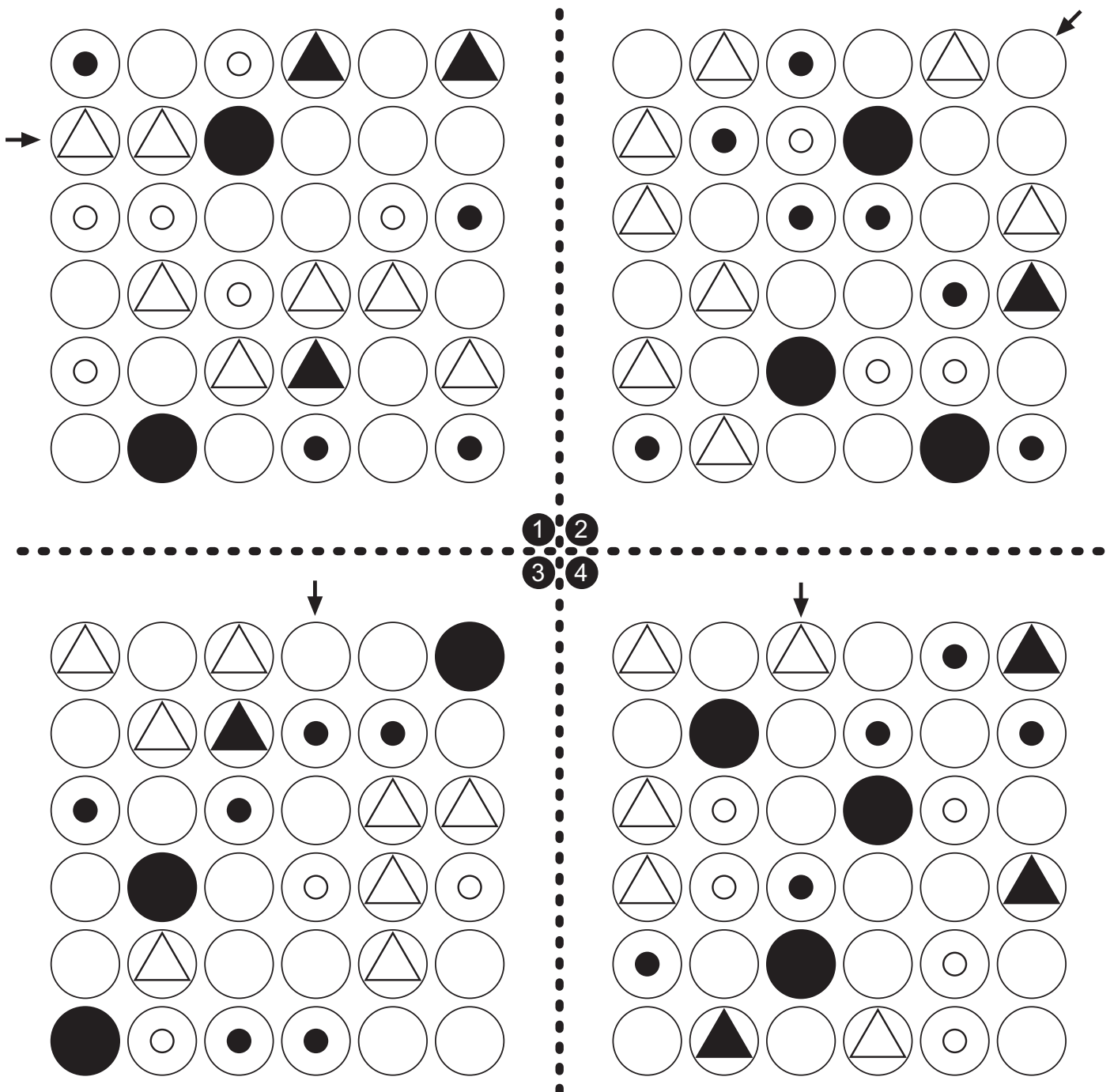
37-40. Ikebana

Locate the given figures in the grid so that each row and column contains each figure exactly once. White figures are transparent and black figures are covering.

- A ○
- B ●
- C ○
- D ●
- E △
- F ▲



Answer format: For the marked row/column, write the corresponding letters for the figures. The answer for the example would be: ABECDF



41. Bonusmatik

Blacken some cells so that remaining cells form some numbers. The figures outside the grid indicate how many digits are there in the sum of the numbers in the corresponding direction. There are at least two numbers in every row and column. Numbers are read either from left to right or from top to bottom. Minimize the absolute value of the difference between the total of all sums at the right and the total of all sums at the bottom.

Scoring: 18, 16, 14, 11, 8, 5, 1 points for the best seven solutions.

Difference in the example:
 $(112+27+17+15+15) - (19+33+24+13+97) = 0$

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

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

1	3	2	1	9
9	3	4	3	7

Answer format: Write the digits in the unpainted cells, row by row from top to bottom. The answer for the example would be: 8329,234,98,123,213

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



Some puzzle ideas are obtained as follows: Step By Step from Özgür Kişisel, Psycho Killer from Mehmet Murat Sevim, Magic R from Ulrich Voigt, Wiring from Riad Khanmagomedov, Ikebana from JPC 16.

* Famous rock song by Talking Heads
 ** A painting by Salvador Dali