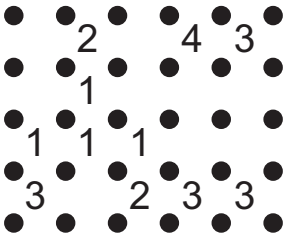
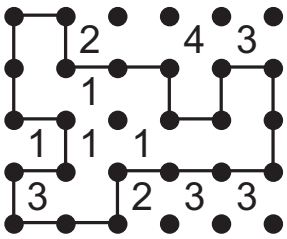
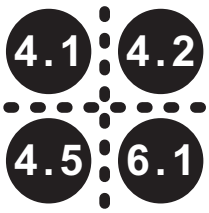
1-4. Polygraph

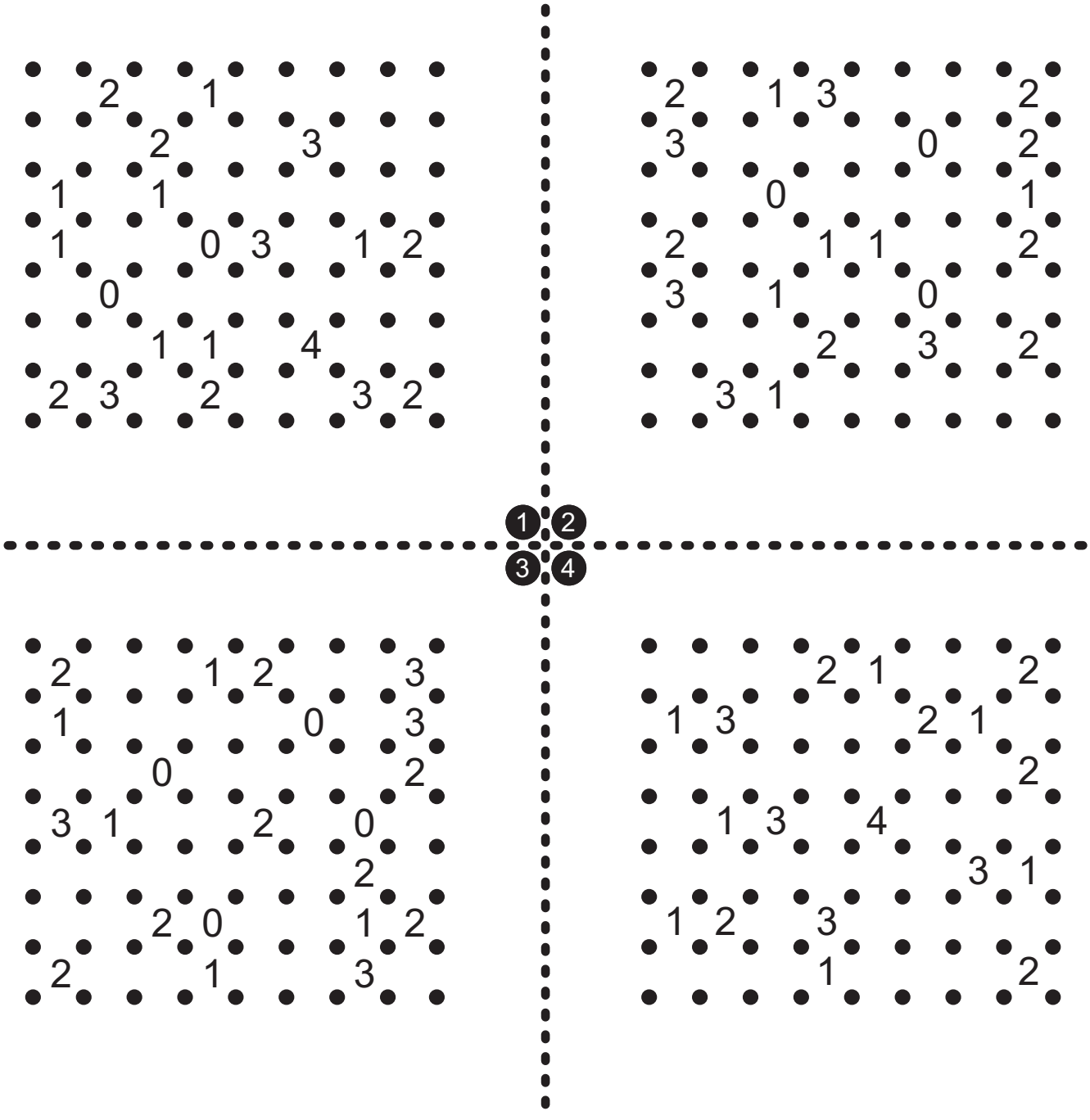
Draw a single continuous loop by connecting neighbouring dots horizontally or vertically. The clues inside the loop indicate the number of its edges used by the loop. The clues outside the loop indicate the number of its edges NOT used by the loop.





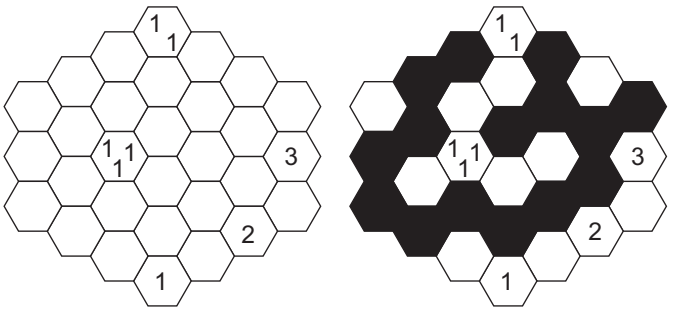


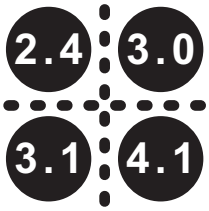
Answer format: *Write the total of numbers inside the loop. The answer for the example would be: 6*



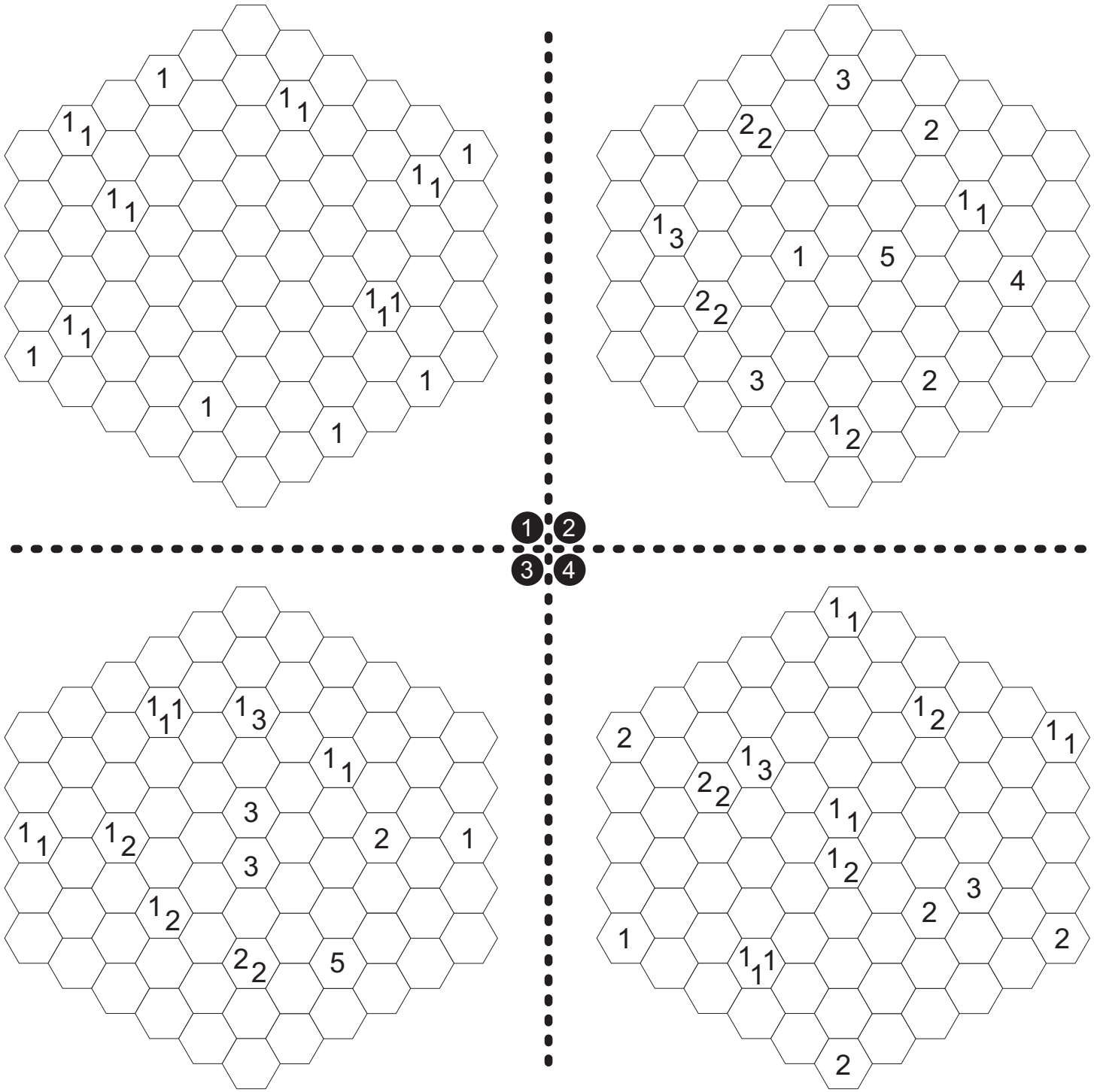
5-8. Hexa Tapa

Paint some cells black to create a continuous wall. Number/s in a cell indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form three hexagons meeting in a point. There are no wall segments on cells containing numbers.



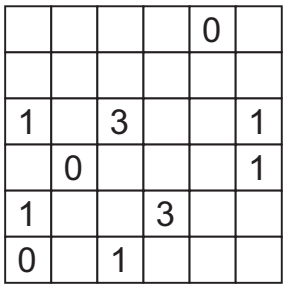


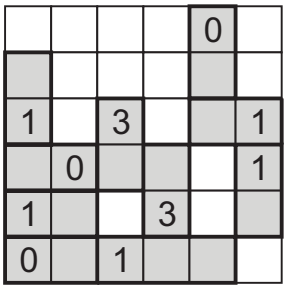
Answer format: *Write the sizes of unpainted areas larger than 1, in increasing order.The answer for the example would be: 6,7*

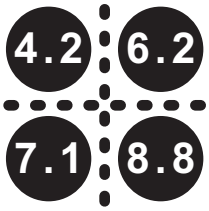


9-12. Tren

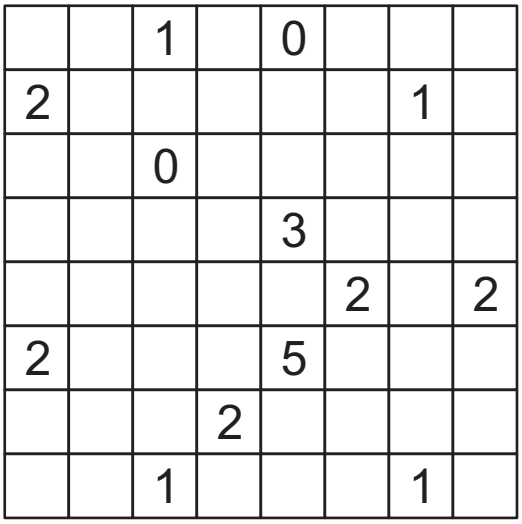
Locate some blocks in the grid, having the size either 1x2 or 1x3. Each number in the grid should be part of a block, indicating the amount of the possible movements of the block. Blocks can only move in the direction of their short edge.

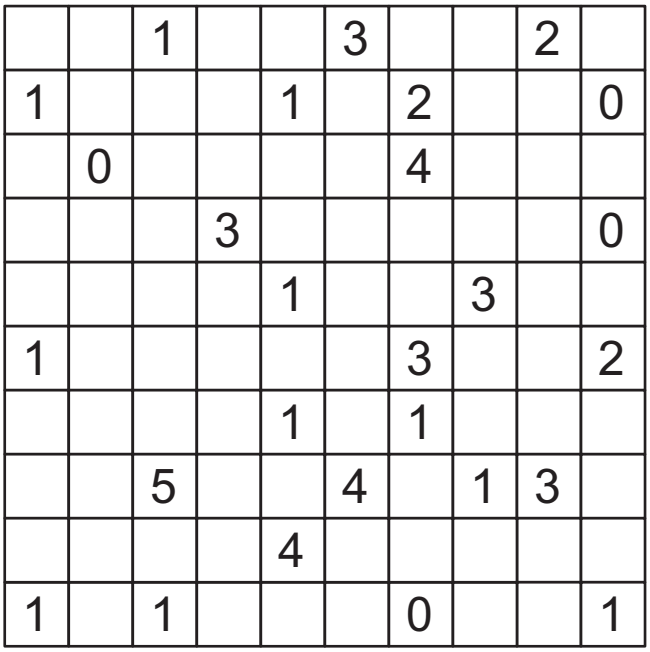


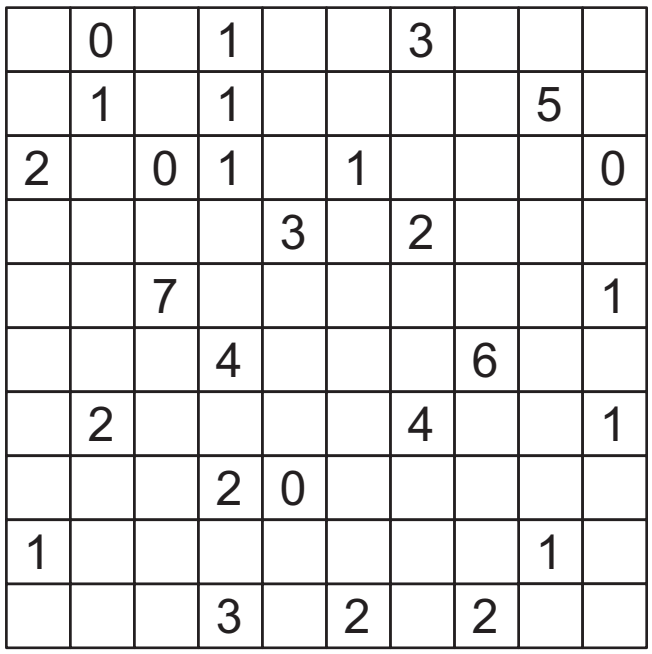


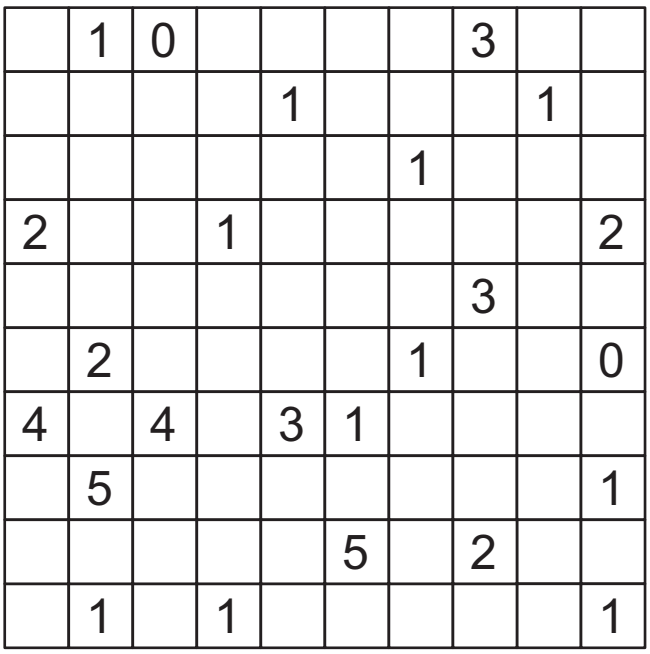


Answer format: *Write the sizes of unoccupied areas, in increasing order. The answer for the example would be: 1,1,2,2,9*



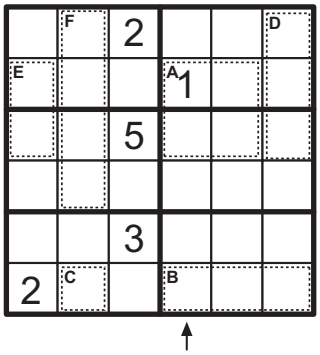


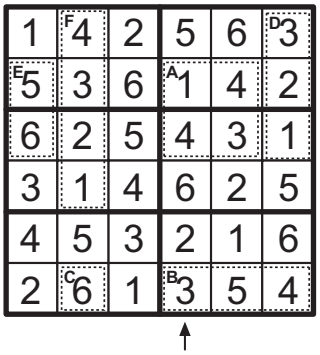


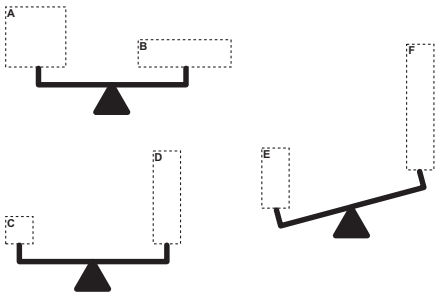


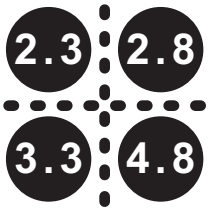
13-16. Scale Sudoku

Fill the grid with digits from 1 to 6 so that each digit appears exactly once in every row, column and 2x3 outlined region. Some marked regions are scaled and the measurings are given next to the grid. The weight of the frames and the pans are ignored.

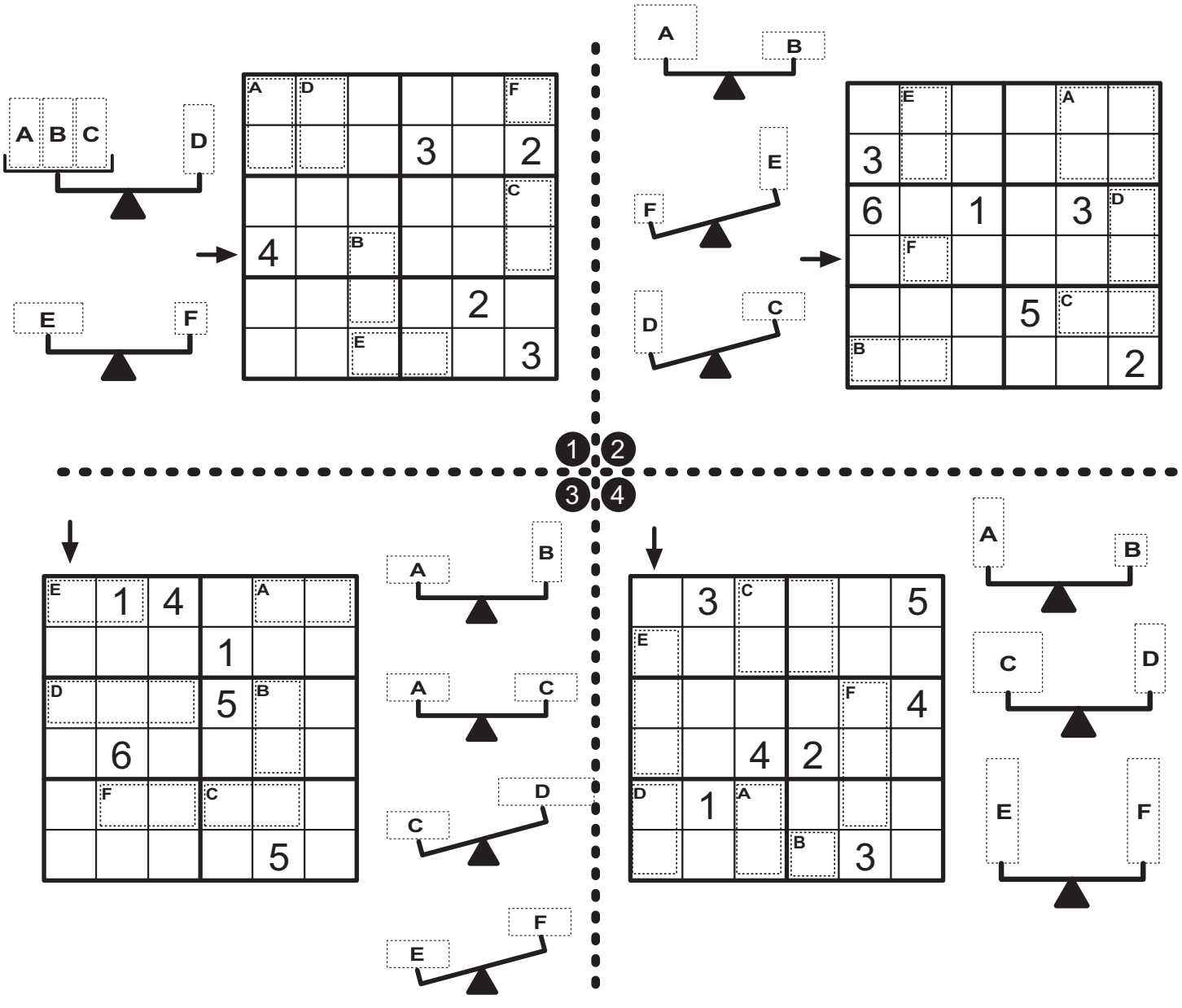






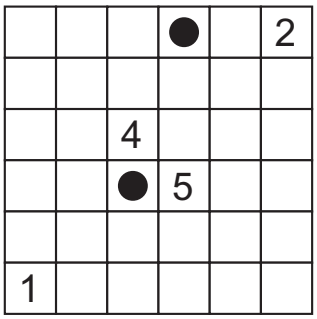


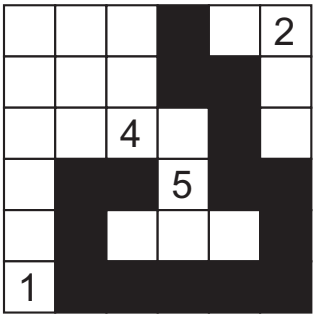
Answer format: *Write the content of the marked row/column. The answer for the example would be: 326415*



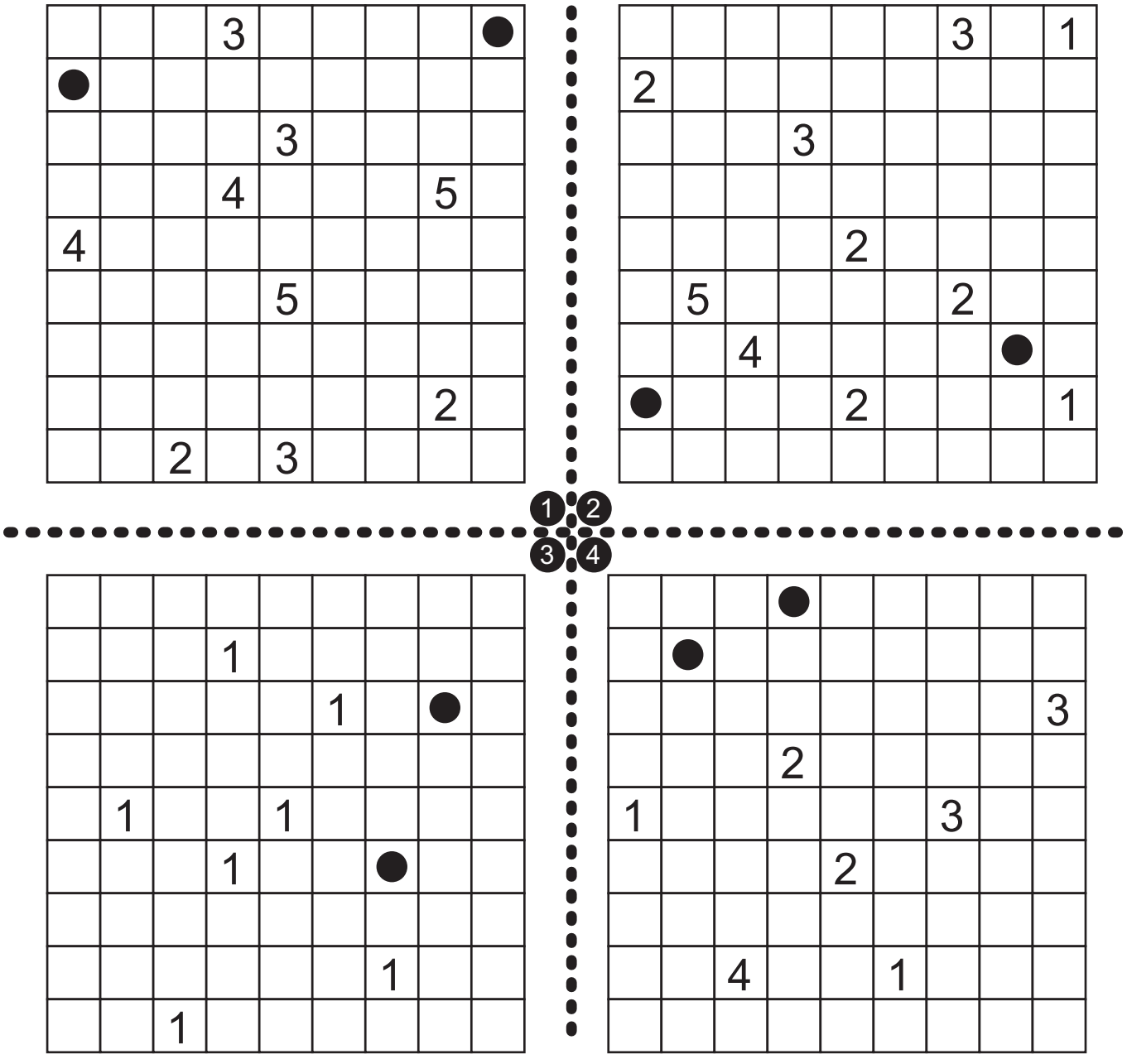
17-20. Horse Snake

Locate a snake in the grid, whose head and tail are given, without touching itself even at a point. The numbers in the grid are knights, which indicate the amount of the snake cells attacked by them. There cannot be any snake segments on cells containing numbers.



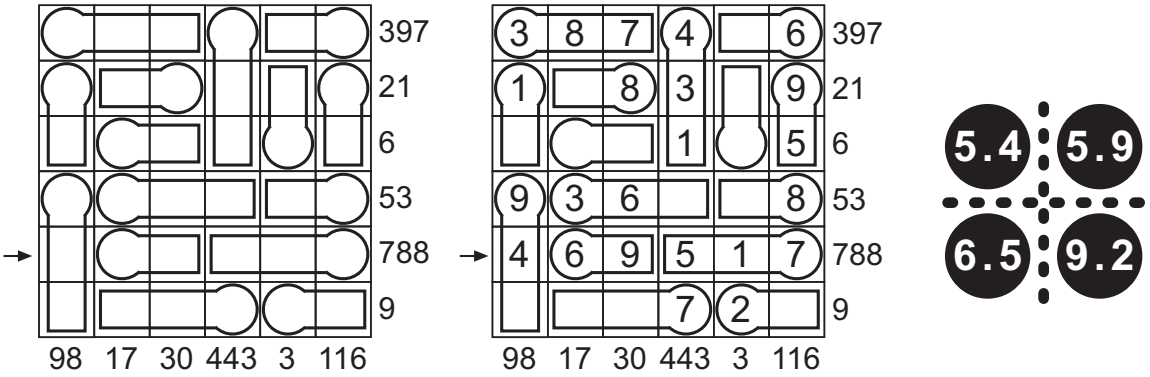


Answer format: Write the length of the horse snake. The answer for the example would be: 15

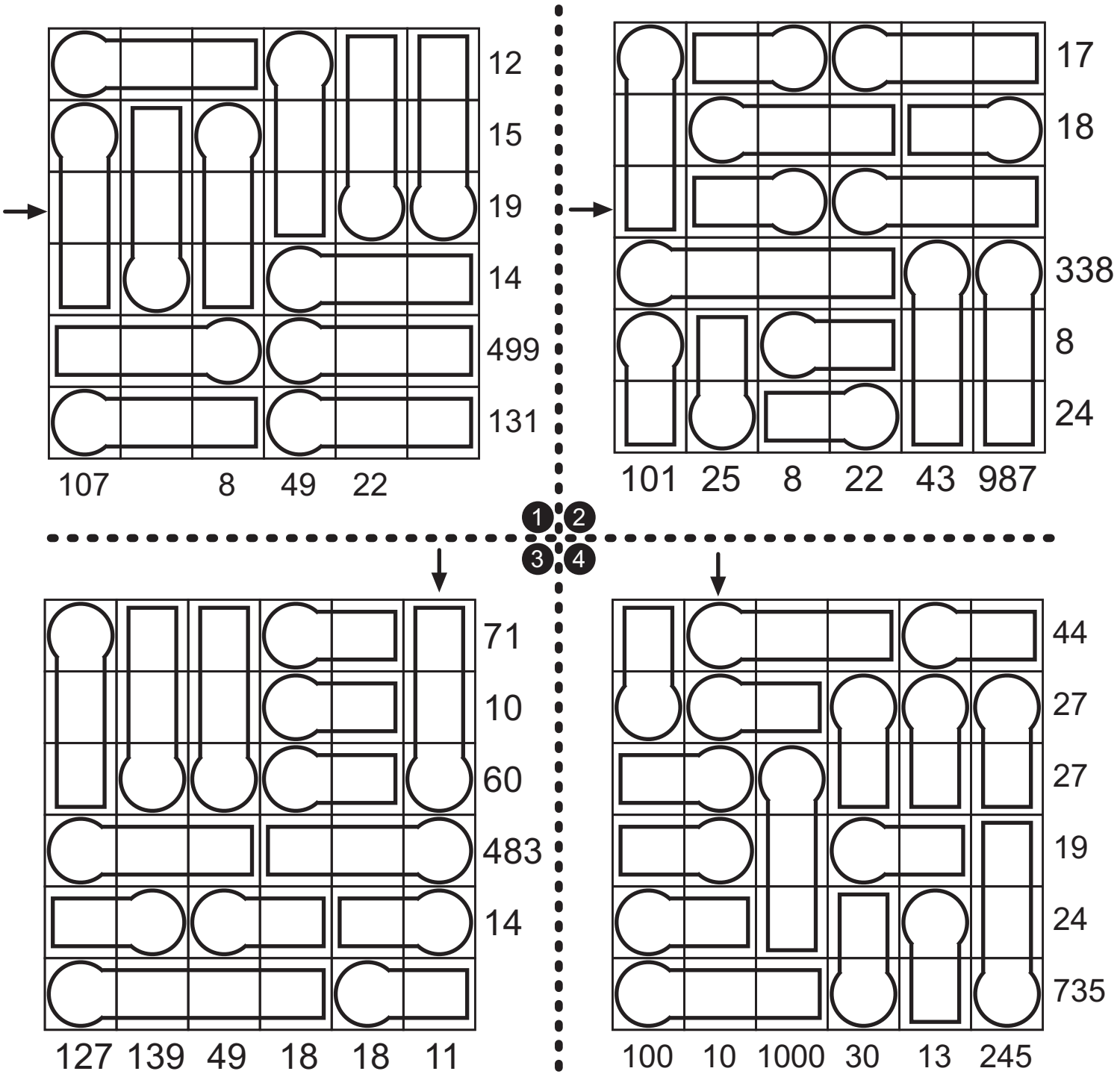


21-24. Thermometer Degree

Place digits 1-9 in the grid so that no digit is repeated within a row/column. Thermometers should be filled regularly, starting from the rounded part. Numbers outside the grid indicate the sum of numbers that can be read in the thermometers, in the corresponding directions. A number in a thermometer is read starting from the rounded part, so this reading may be in any of the four directions.

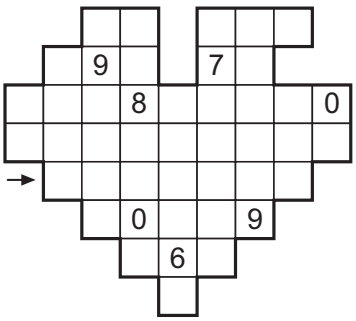


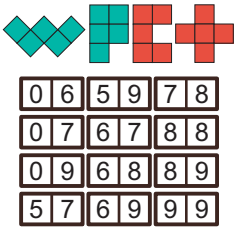
Answer format: Write the content of the marked row/column. Use 0 for empty cells. The answer for the example would be: 469517

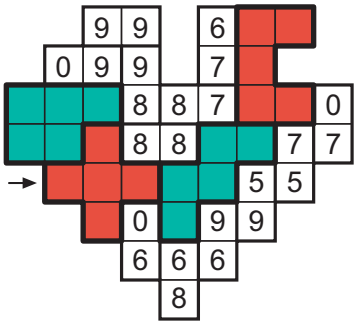


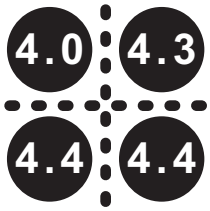
25-28. 44 Cells

Place all given dominoes and pentominoes in the grid. Pentominoes can be rotated and/or reflected. Connected dominoes must have same number on the touching side. Also the dominoes should form two different areas, separated by one or more pentominoes, each including six dominoes. Some parts of dominoes are already given.

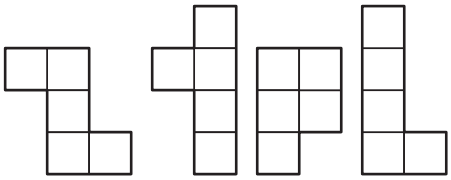


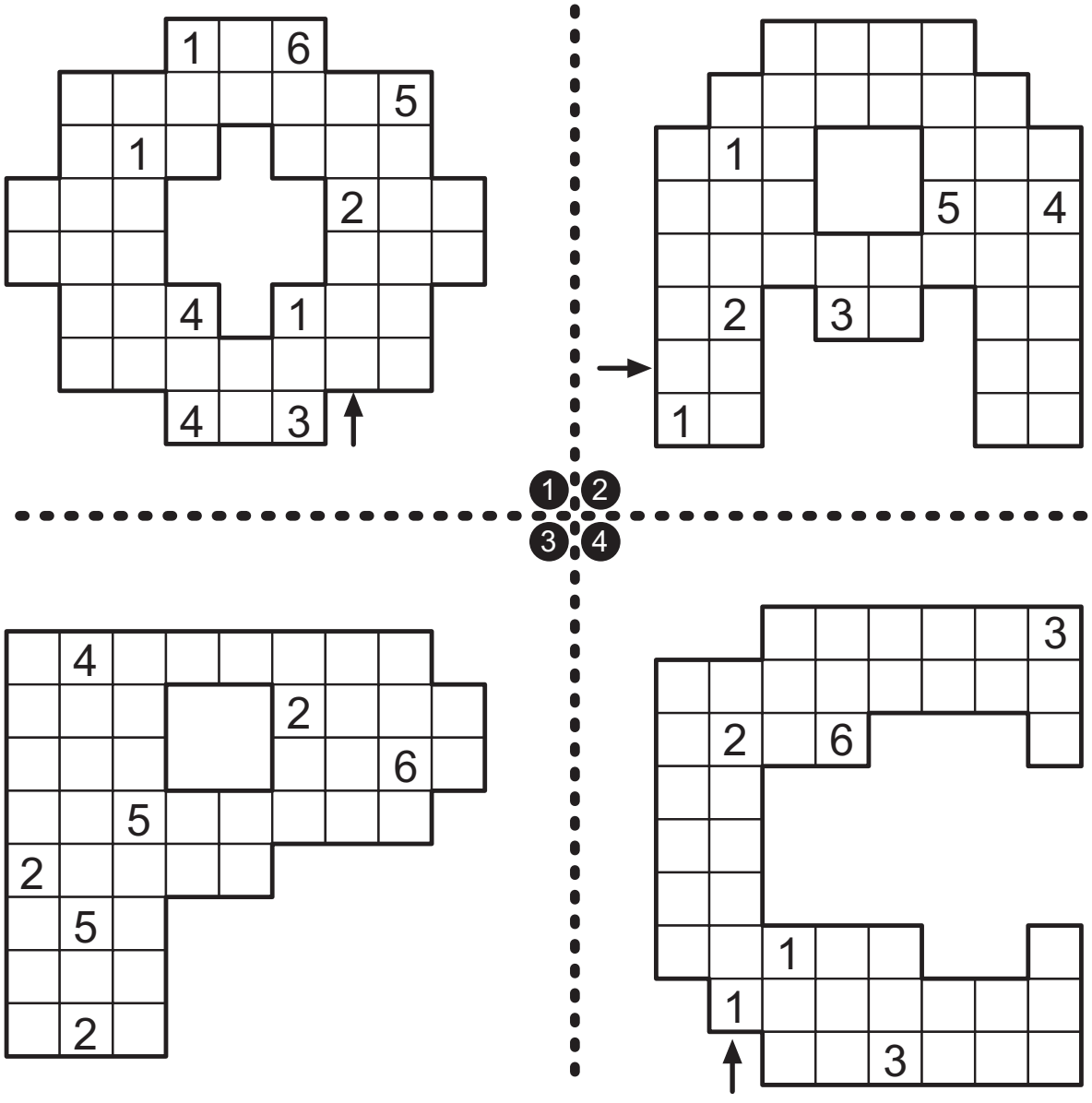






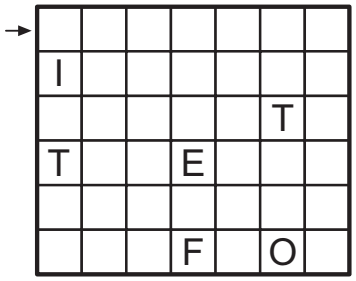
Answer format: Write the content of the marked row/column. Use the corresponding letters for the pentominoes. The answer for the example would be: XXXWW55



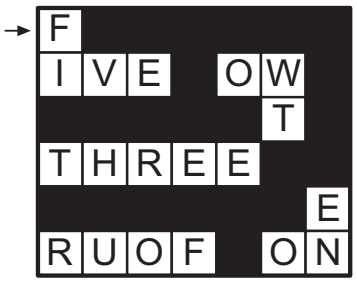


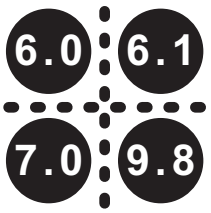
29-32. Island Of Numbers

Put all the numbers (given in words) in the grid as a snakelike strip which does not touch or cross itself. Some letters of the words are given. All remaining cells should be painted black,forming a continuous black wall, separating all words (as in a Nurikabe puzzle). All black cells should be connected to each other from the sides and there cannot be any 2x2 area fully painted black.



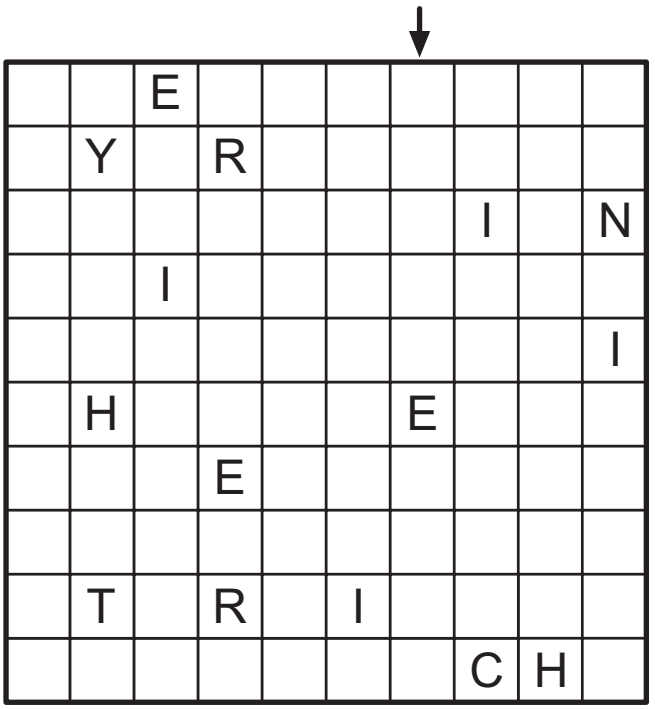
O N E
T W O
T H R E E
F O U R
F I V E

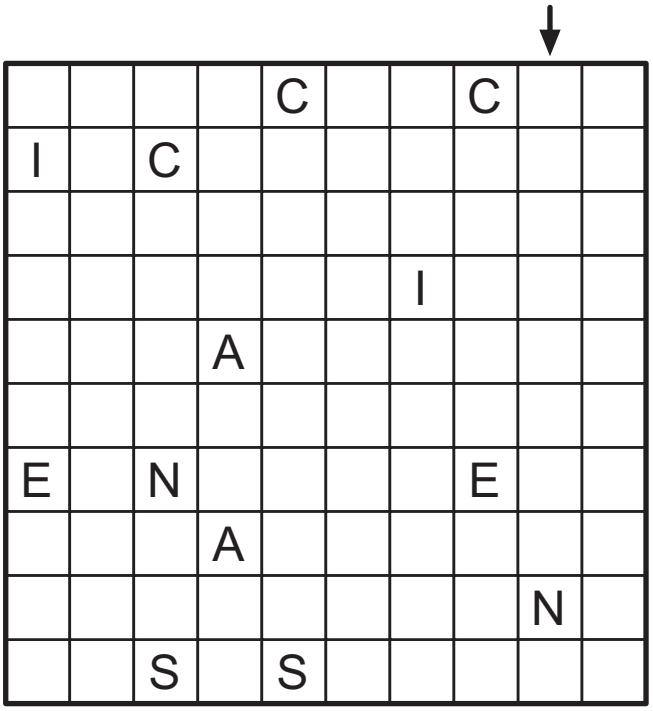


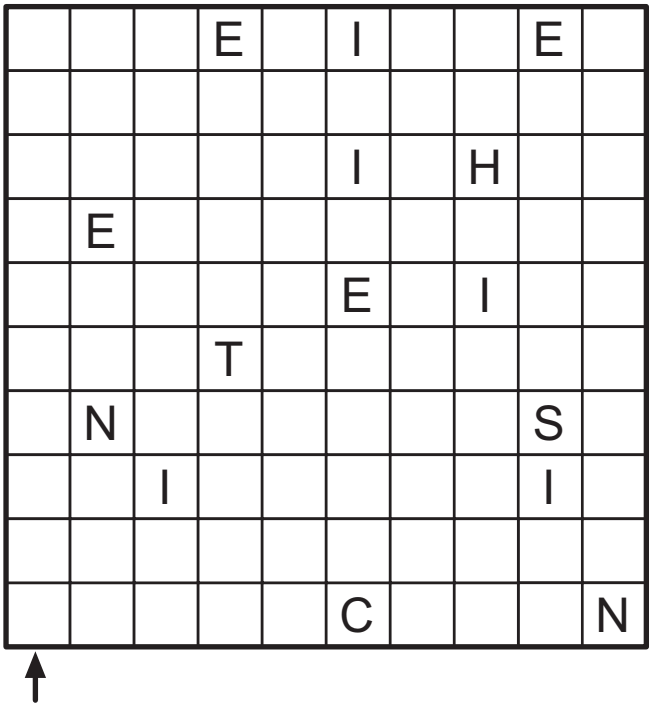


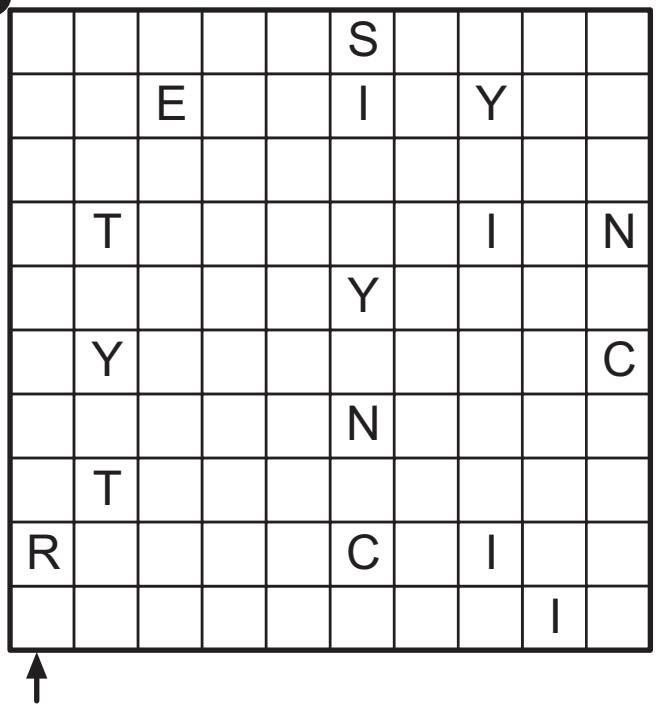
Answer format: Write the content of the marked row/column. Use 1 for blackened cells. The answer for the example would be: F111111

YKSI - DVI - THREE - CHYETIRYE - CINQ - ALTI - SIEBEN - HACHI - NOUA



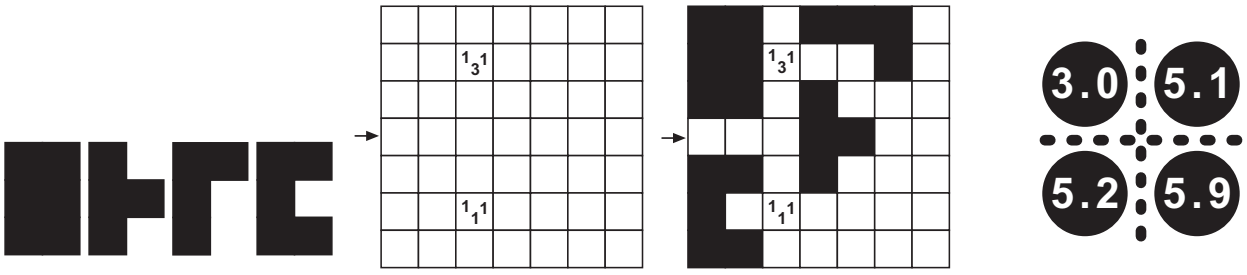




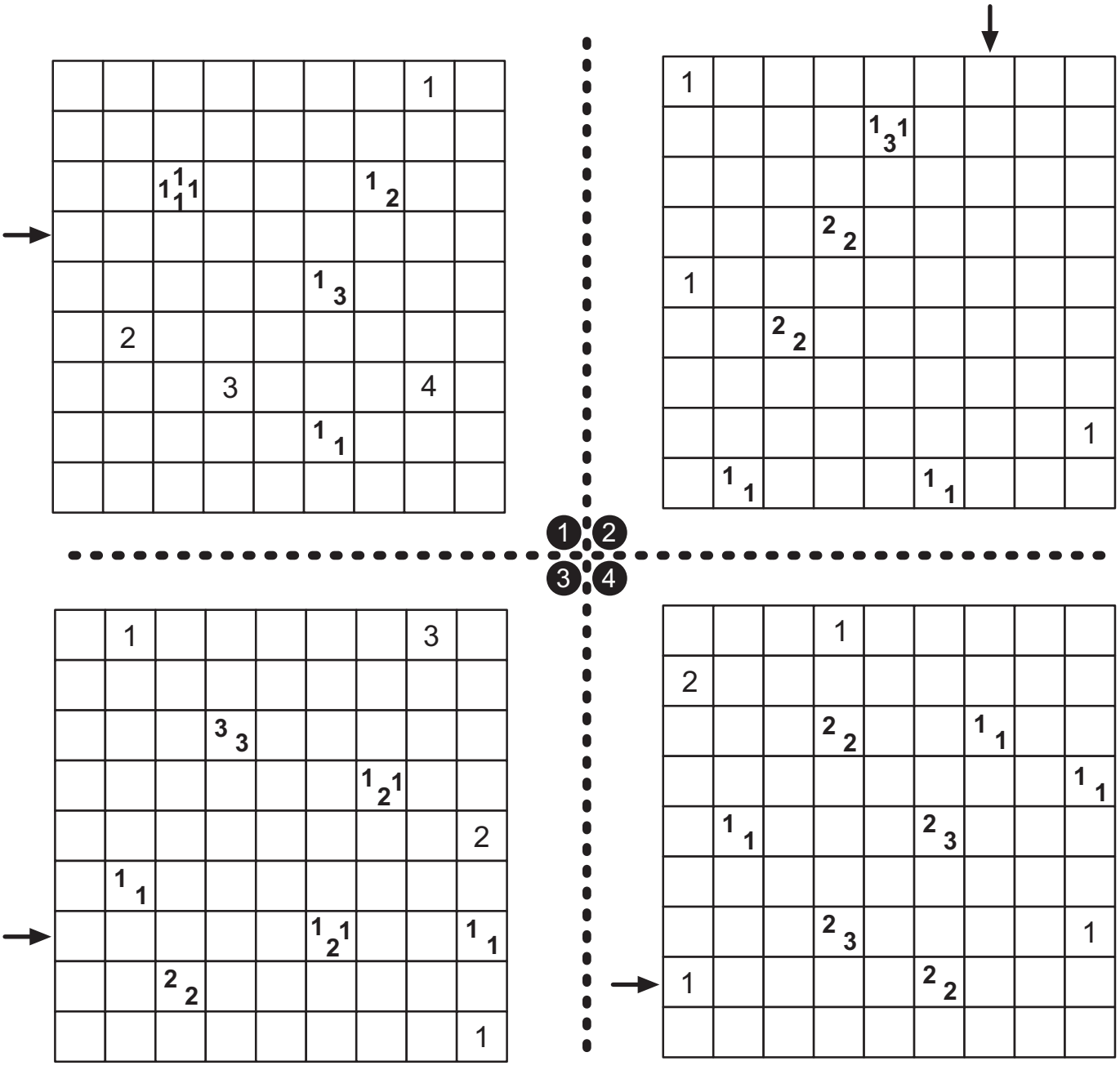


33-36. Serendipity

Paint some cells black so that all painted cells include the given tetromino set (OAPC letters for the example). Number/s in a cell indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks.There are no tetromino pieces on cells containing numbers. Tetrominoes cannot be mirrored and cannot touch each other even diagonally.



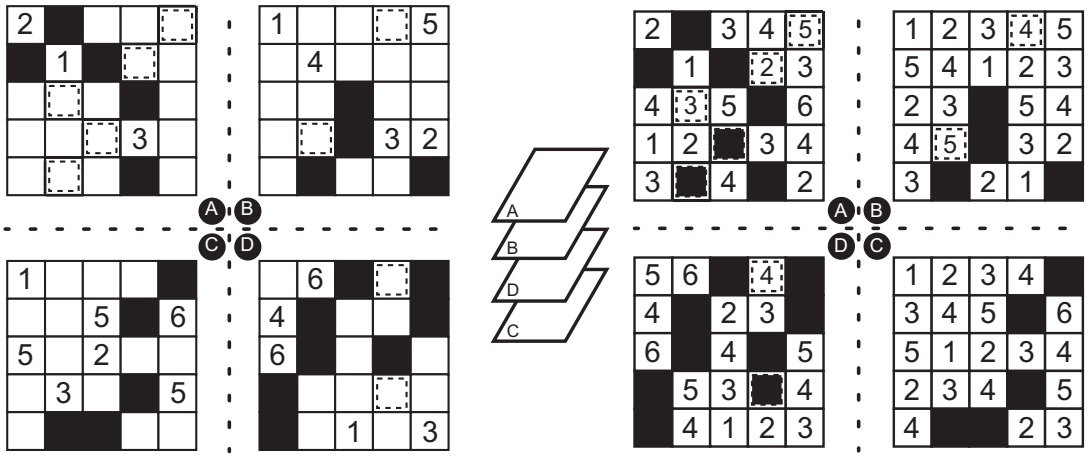
Answer format: Write the content of the marked row/column. Use 1 for blackened cells and 0 for white cells. The answer for the example would be: 0001100



37-40. Tetramisu

Fill the grid with numbers 1 to 9 (1 to 6 for the example). Each row and column must be formed of consecutive series, but not necessarily in order. Same numbers cannot touch each other, not even diagonally. All blackened cells are given.

You are given four grids and each of them should satisfy the rules above. You should perfectly overlap these grids in some order, so that each puzzle can be solved. The cells with dashed lines represent the holes in the grid, through which you can see the lower layer. You may cut out this cells if you wish.



1 solved puzzle: **6.4**

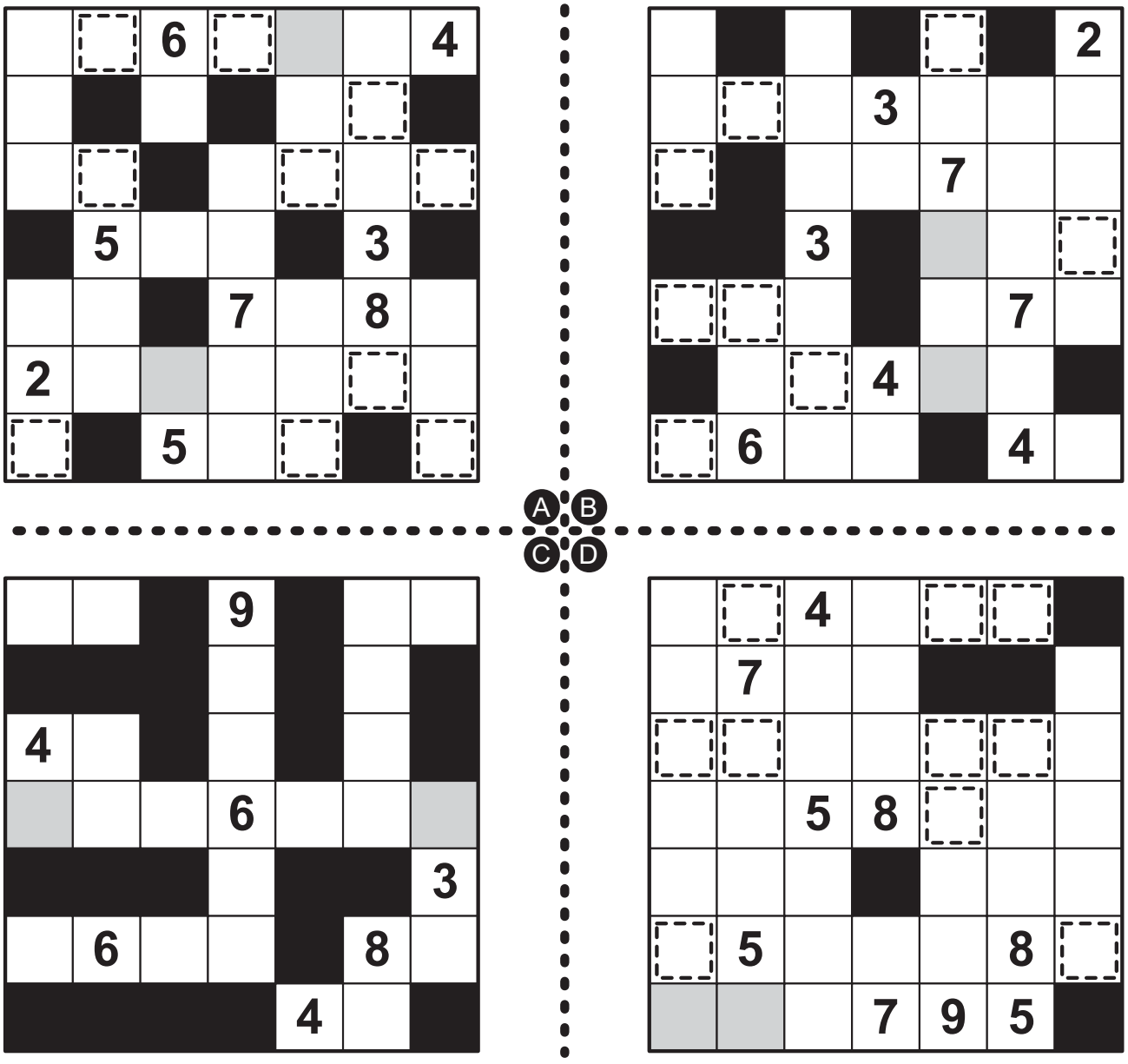
2 solved puzzles: **9.4**

3 solved puzzles: **13**

4 solved puzzles: **17**

2,2 bonus for correct order

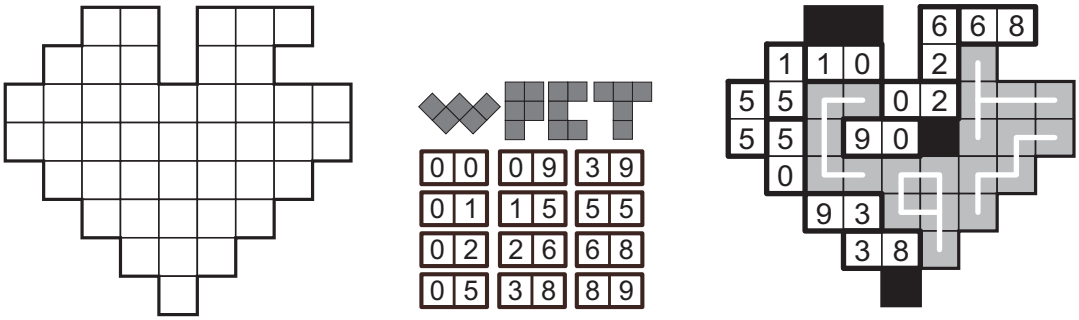
Answer format: *Starting from the topmost one, write the order of overlapped grids; followed by the content of the grey cells, from top left to bottom right. The answer for the example would be: A4,B2,D5,C1*



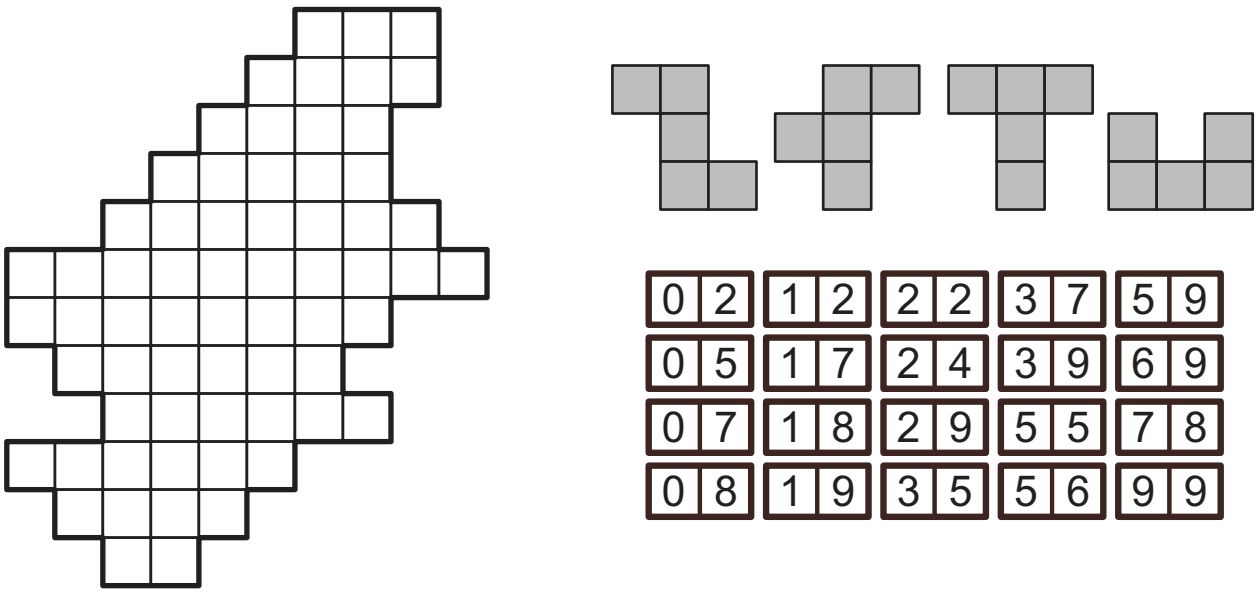
41. 65 Cells

Place given dominoes and pentominoes (W,P,C,T for the example) in the grid, using every piece at most once. Pentominoes can be rotated and/or reflected. Connected dominoes must have same number on the touching side. The trick of making a 6 turn 9 is unacceptable!
The dominoes should form at least two different areas, separated by one or more pentominoes. Each area has a value: the sums of the numbers in dominoes. Minimize the difference between the biggest value and the smallest value.

Scoring: 20 + (amount of areas x1.4) - (difference x 1.1) - (amount of empty cells x 0.3) - (amount of unused dominoes x 0.5)
Scoring for the example: 20 + 3x1.4 - 11x1.1 - 4x0.3 - 2x0.5 = 9.9 points



Answer format: Write the content of the grid, row by row from top to bottom. Use B for empty cells and the corresponding letters for pentominoes. The answer for the example would be: BB668, 1102T, 55CC02TTT, 55C90BTWW, 0CCPPWW, 93PPW, 38P, B



Some puzzle ideas are obtained as follows: Tren from 15th JPC, 44 Cells from Nikola Zivanovic, Tetramisu from Mehmet Murat Sevim.