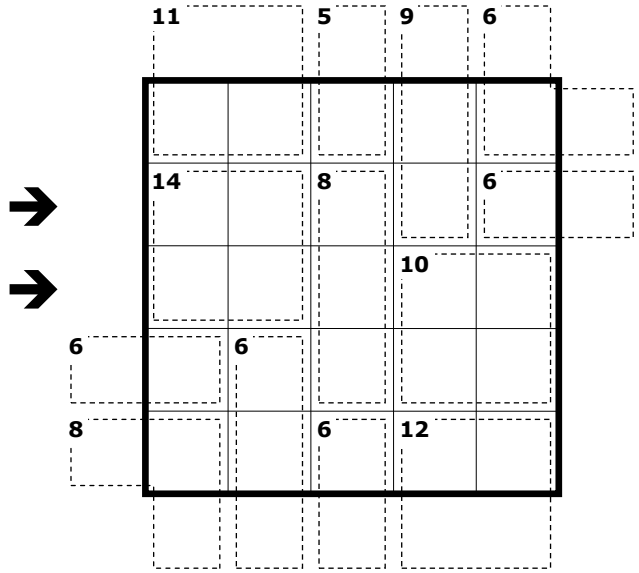
1. KILLER SKYSCRAPERS (26 POINTS)

Place the digits from 1 to 5 inside the bold outlined area in every row and column. Each digit represents a skyscraper with a height that corresponds with the digit. Digits outside the bold outlined area represent the number of skyscrapers that is visible from that view point. Higher skyscrapers hide lower skyscrapers. The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.

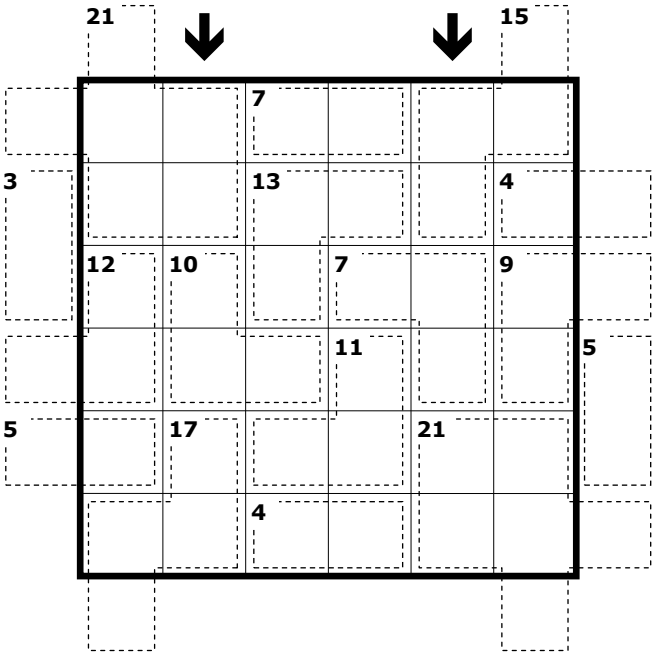
Answer key:
The digits in the marked rows inside the bold outlined area.



2. KILLER SKYSCRAPERS (38 POINTS)

Place the digits from 1 to 6 inside the bold outlined area in every row and column. Each digit represents a skyscraper with a height that corresponds with the digit. Digits outside the bold outlined area represent the number of skyscrapers that is visible from that view point. Higher skyscrapers hide lower skyscrapers. The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.

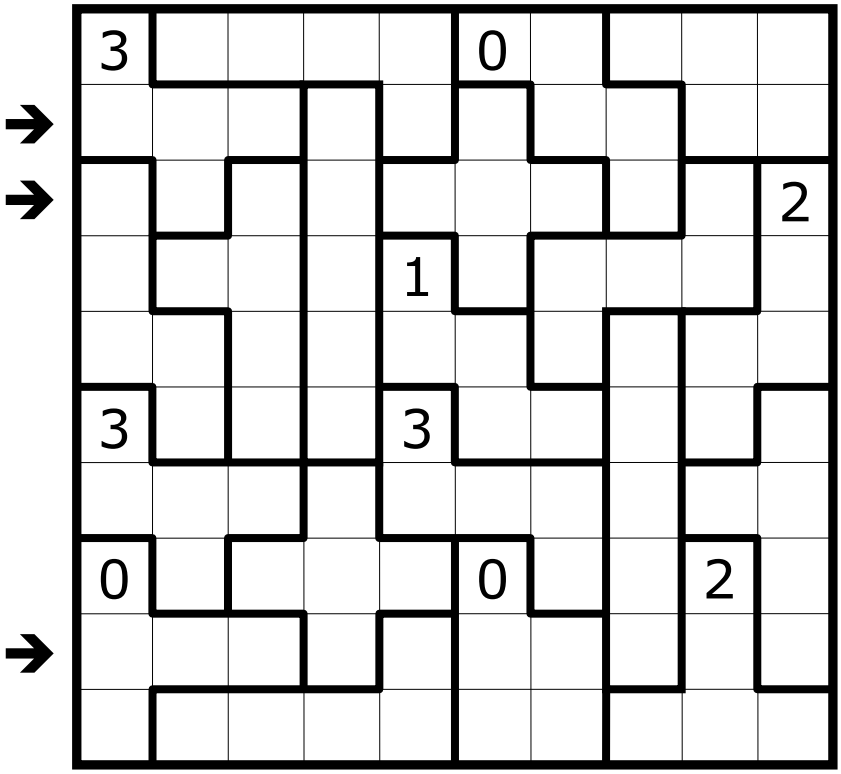
Answer key:
The digits in the marked columns inside the bold outlined area.



3. Regional Yajilin (27 Points)

Paint some cells black. Black cells are not allowed to be orthogonally adjacent. Draw a closed loop that passes through all the remaining white cells. The loop does not cross or overlap itself. A number in a bold outlined area indicates the number of black cells in that area. Cells with numbers are either part of the loop or have to be painted black.

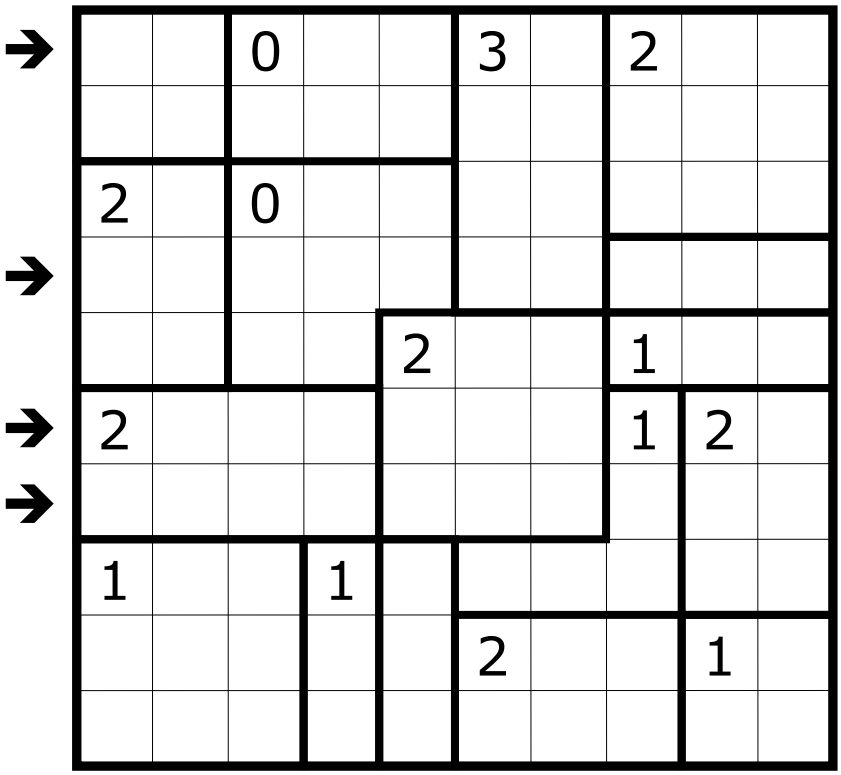
Answer key:
For each of the marked rows the number of black cells.



4. Regional Yajilin (83 Points)

Paint some cells black. Black cells are not allowed to be orthogonally adjacent. Draw a closed loop that passes through all the remaining white cells. The loop does not cross or overlap itself. A number in a bold outlined area indicates the number of black cells in that area. Cells with numbers are either part of the loop or have to be painted black.

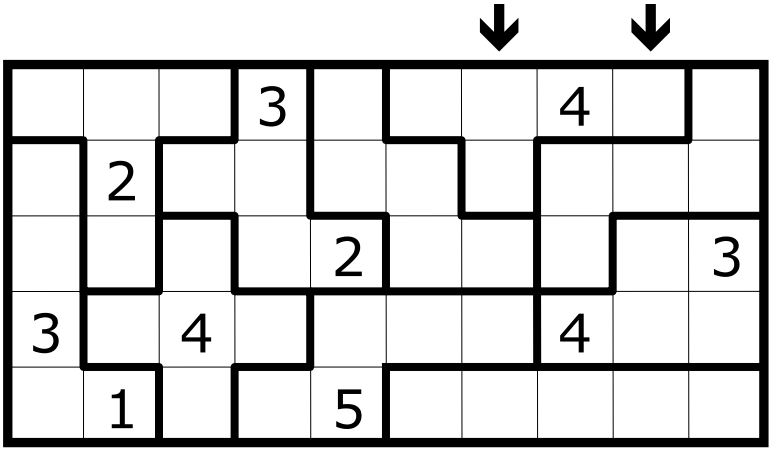
Answer key:
For each of the marked rows the number of black cells.



5. CAPSULES (14 POINTS)

Place the digits from 1 to 5 in every bold outlined area. Equal digits must not touch each other, not even diagonally.

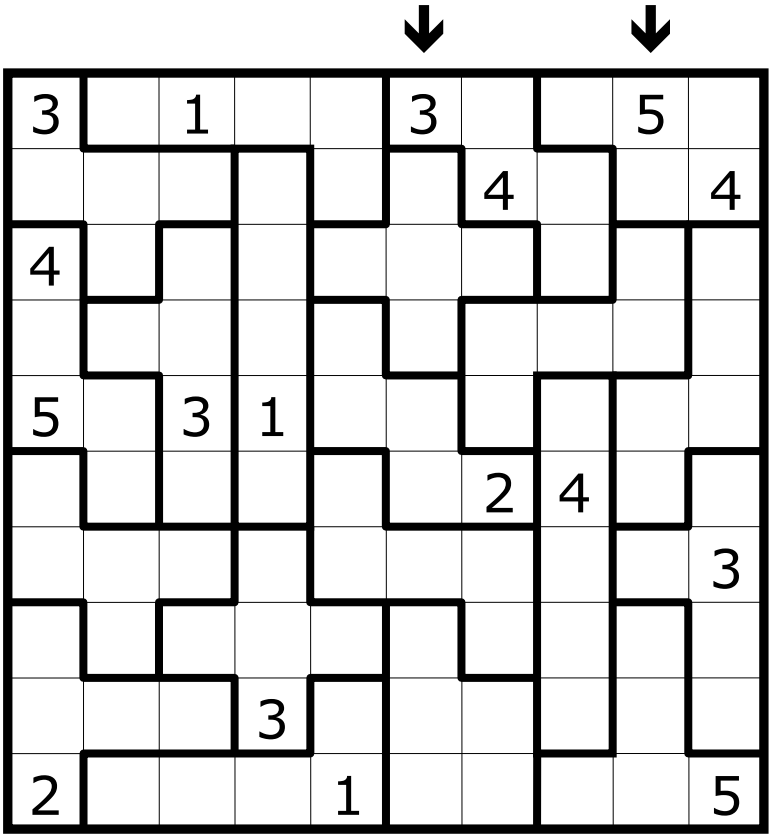
Answer key:
The digits in the marked columns.



6. CAPSULES (57 POINTS)

Place the digits from 1 to 5 in every bold outlined area. Equal digits must not touch each other, not even diagonally.

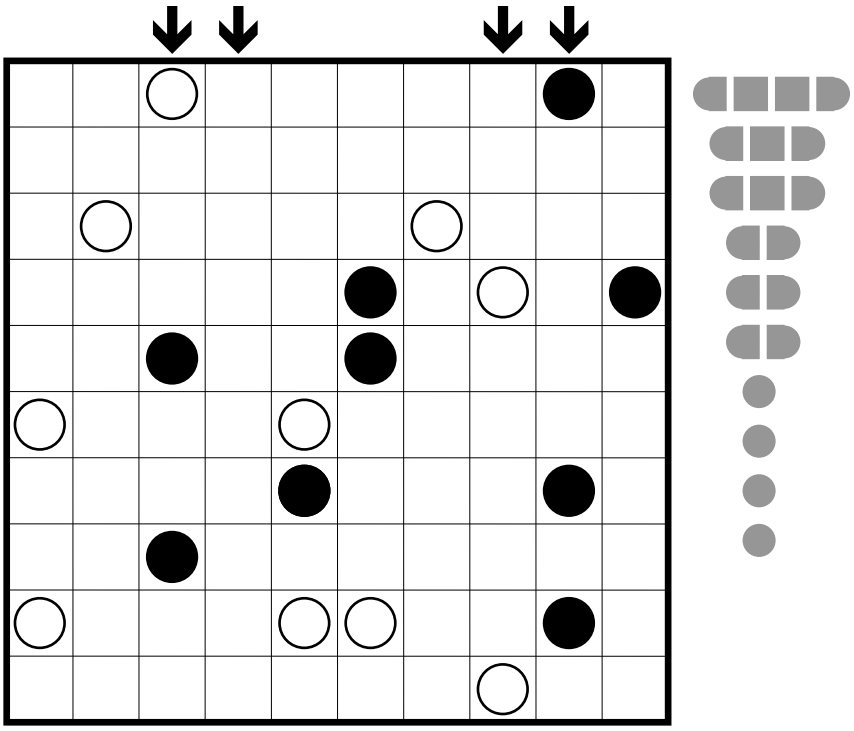
Answer key:
The digits in the marked columns.



7. Masyu Battleships (29 Points)

Draw a single closed loop passing through all circles in the grid. The loop must make a 90° angle at all black circles and go straight for at least two cells in both directions before turning again. The loop must go straight through all white circles and make a 90° angle in at least one of the adjacent cells in the loop direction.
In all cells that are no part of the Masyu, the battleship fleet has to be placed. Ships don't touch each other, not even diagonally.

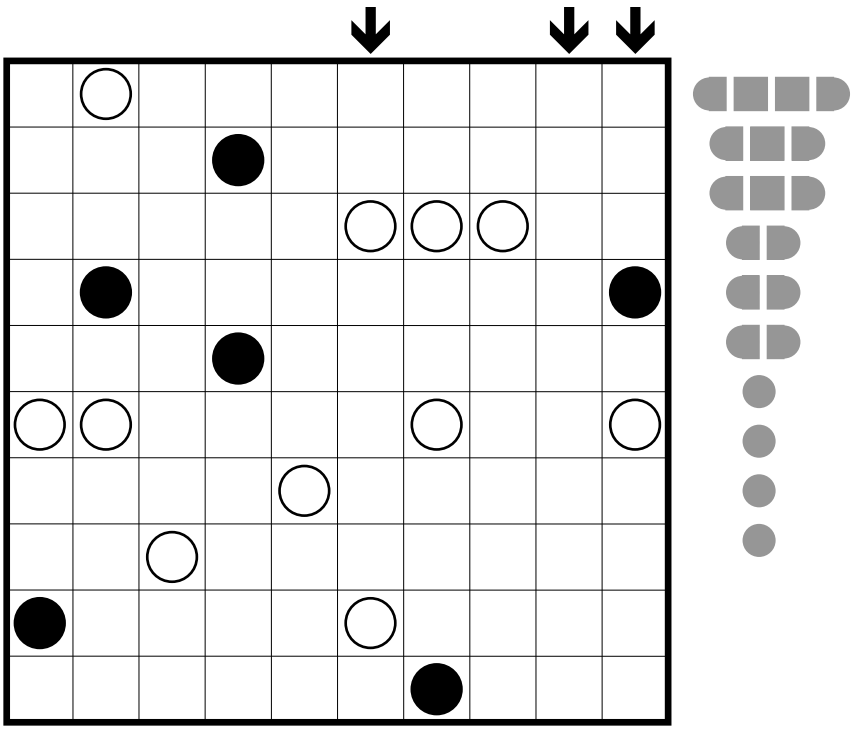
Answer key:
For each marked column the number of cells occupied by ship parts.



8. Masyu Battleships (26 Points)

Draw a single closed loop passing through all circles in the grid. The loop must make a 90° angle at all black circles and go straight for at least two cells in both directions before turning again. The loop must go straight through all white circles and make a 90° angle in at least one of the adjacent cells in the loop direction.
In all cells that are no part of the Masyu, the battleship fleet has to be placed. Ships don't touch each other, not even diagonally.

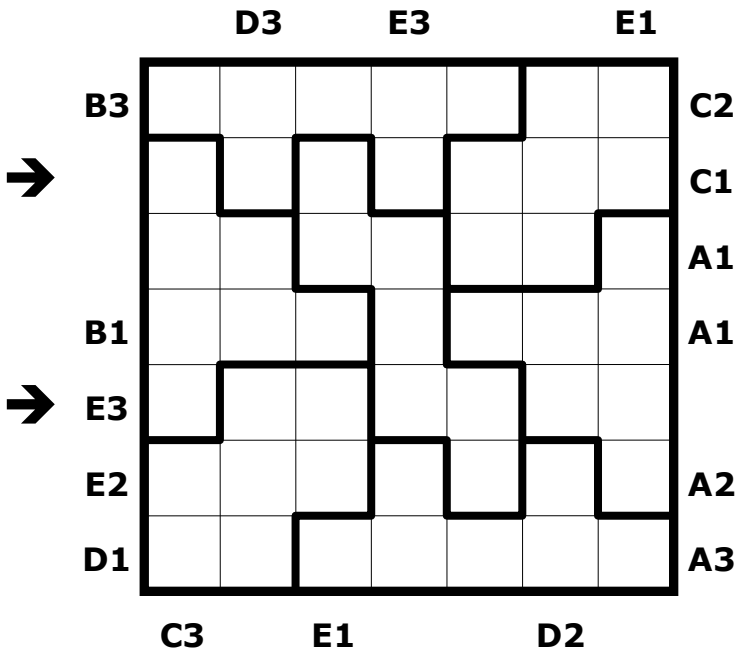
Answer key:
For each marked column the number of cells occupied by ship parts.



9. Easy as Chaos ABC (44 Points)

Place the letters from A to E in every row, column and bold outlined irregular area. Two cells per row, column and area remain empty. The letters outside the grid indicate the position of that letter, ignoring empty cells.

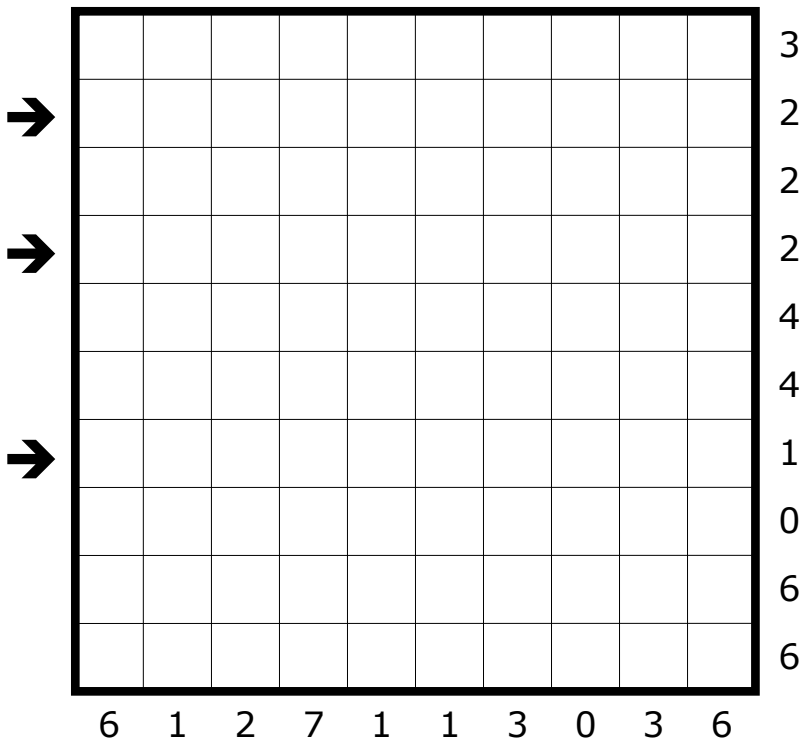
Answer key:
The content of the marked rows; '-' for empty cells.

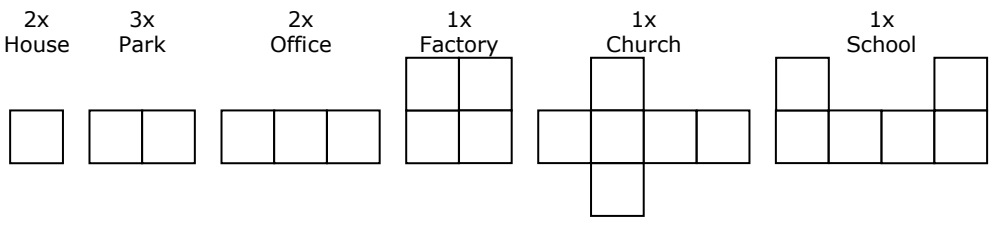


10. City Construction (64 Points)

Place all buildings in the grid. Buildings may be rotated and mirrored. They may not touch each other, not even diagonally. Digits outside the grid represent the number of cells in that row or column used by buildings. Draw a closed loop that passes through all the remaining white cells. The loop does not cross or overlap itself.

Answer key:
For each of the marked rows the number of 90° angles of the loop.

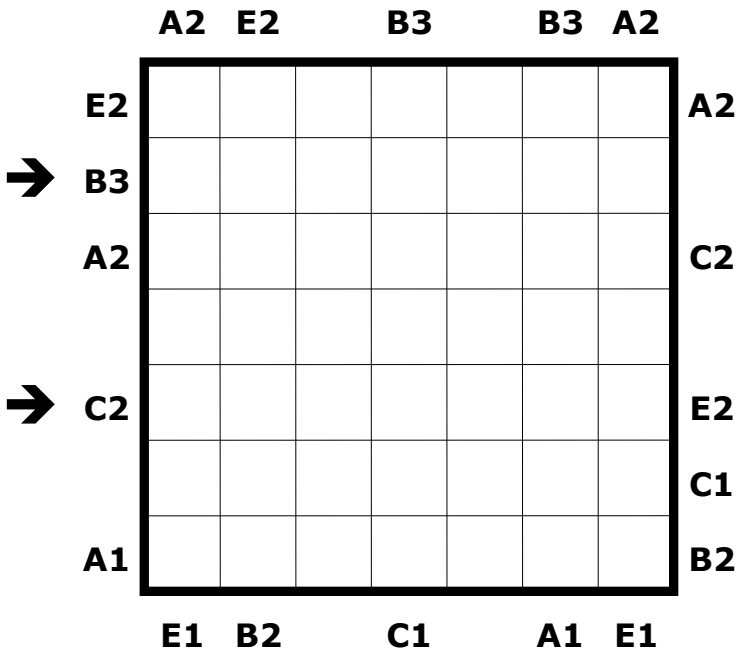




11. Easy as ABC – No Touch (40 Points)

Place the letters from A to E in every row and column. Two cells per row and column remain empty. The letters outside the grid indicate the position of that letter, ignoring empty cells. Equal letters must not touch each other diagonally.

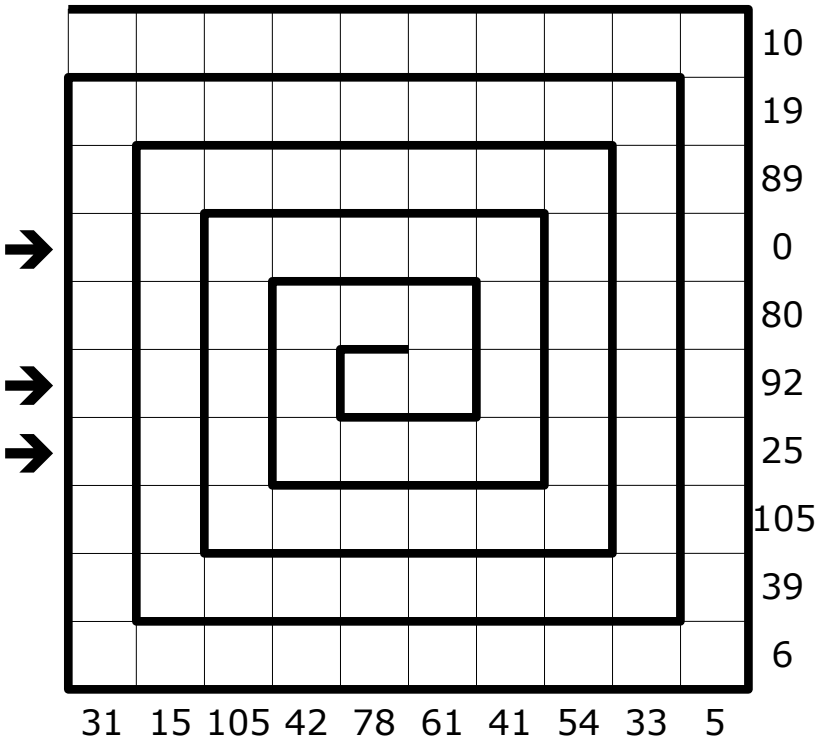
Answer key:
The content of the marked rows; '-' for empty cells.

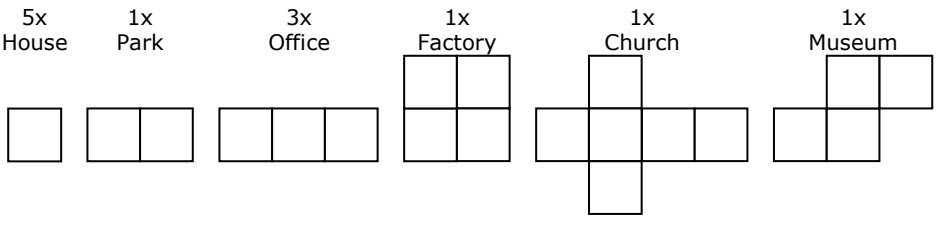


12. Spiral City Construction (74 Points)

Place all buildings in the grid. Buildings may be rotated. They may not touch each other, not even diagonally. Draw a closed loop that passes through all the remaining white cells. The loop does not cross or overlap itself. The given grid is a spiral. Building segments are numbered from 1 to 30 starting from the entrance of the spiral (top left) and moving towards the center. The numbers outside the grid represent the sum of the building segments in the corresponding row or column.

Answer key:
For each of the marked rows the number of 90° angles of the loop.

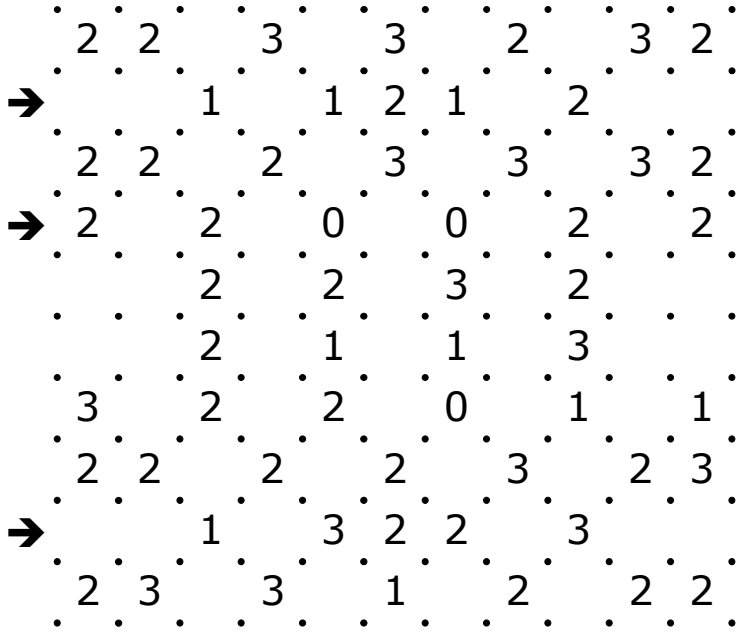


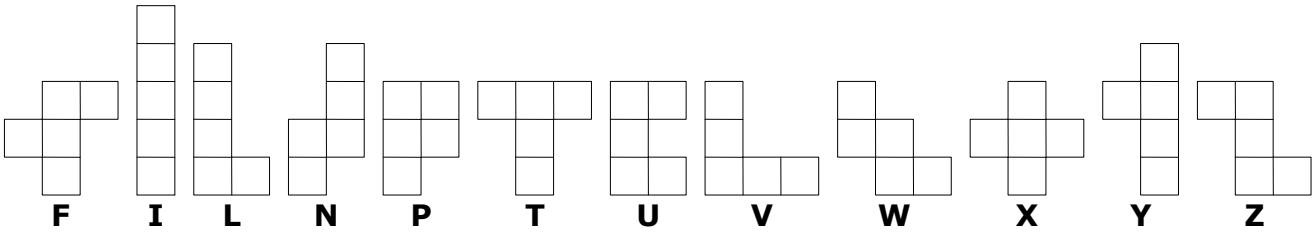


13. Filled Loop (60 Points)

Draw a single closed loop along the grid lines. The loop does not cross or touch itself. The numbers in the grid indicate how many sides of the cell are used for the loop. Fill the loop with the 12 pentominos; inside the loop are 60 cells. Adjacent pentominos touch each other at exactly one border segment. There ar no points wher three or more Pentominos meet. Pentominos may be rotated and/or mirrored.

Answer key:
For the marked rows the letters of the first 3 appearing pentominos; '-' if there are not enough pentominos.

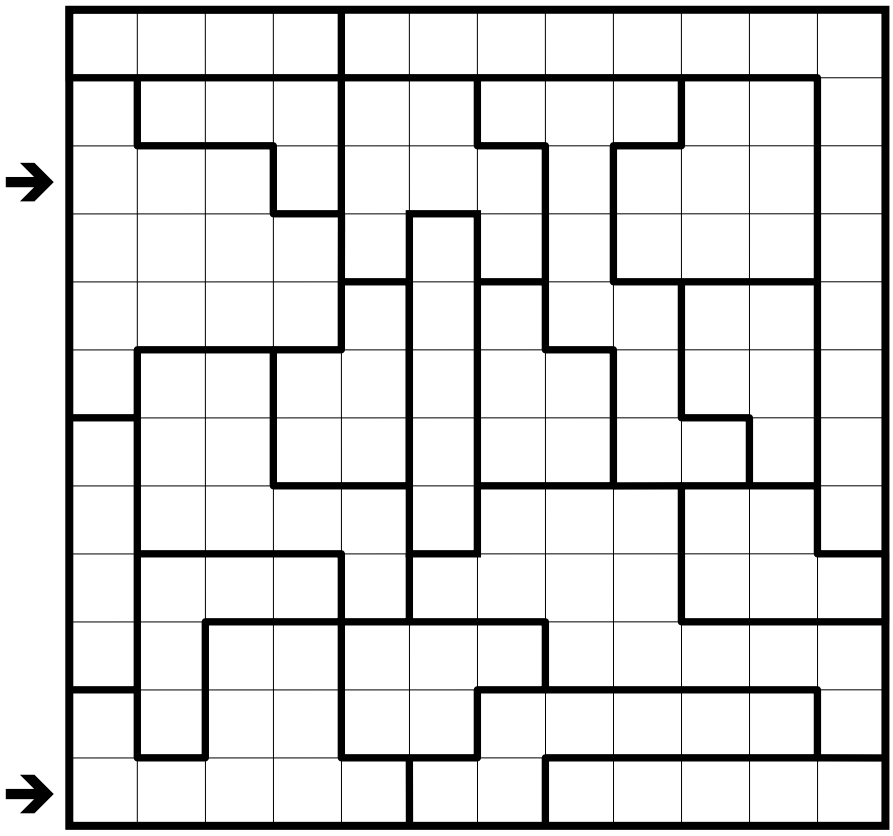


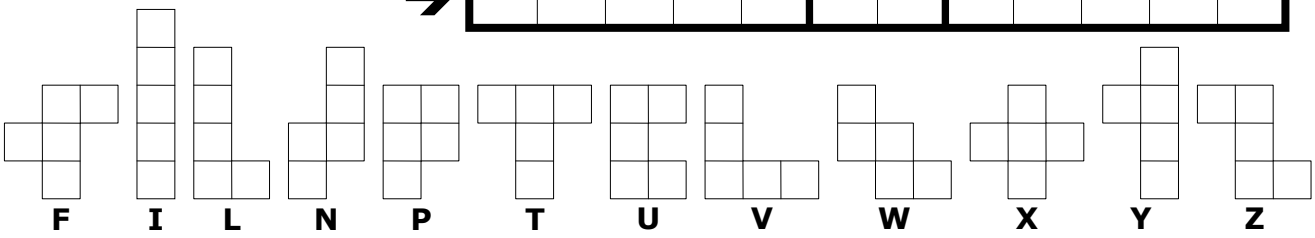


14. Pentomino in the Box (58 Points)

Place the 12 pentominos in the grid, in such a way that they don't touch each other, not even diagonally. The pentominos may be rotated and/or mirrored. Every bold outlined area contains exactly three cells that belong to two different pentominos.

Answer key:
For each of the marked rows the letters of the first 3 appearing pentominos; '-' if there are not enough pentominos.



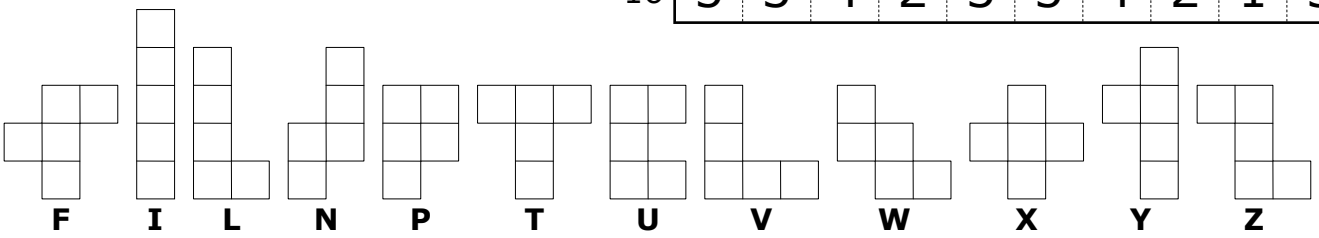


15. JAPANESE SUMS PENTOMINOS (64 POINTS)

Place all 12 pentominos in the grid. The pentominos may be rotated and/or mirrored. The numbers outside the grid represent the sums of the blocks of cells covered by pentominos in the respective row or column. The numbers are arranged in ascending order.

Answer key:
For each of the marked rows the letters of the first 3 appearing pentominos;
'-' if there are not enough pentominos.

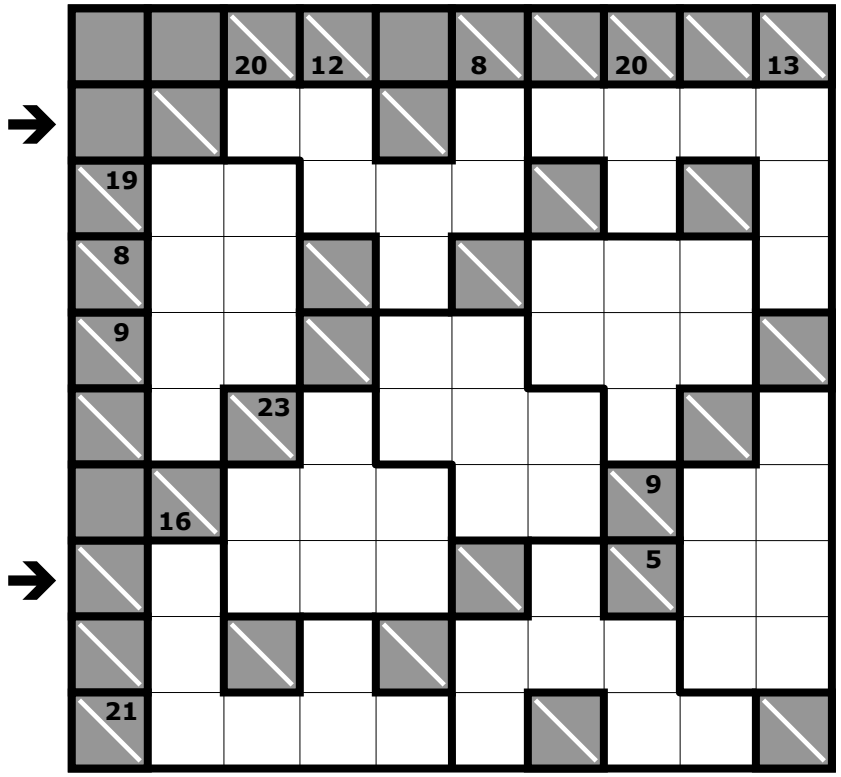
				1						
			1	2	1	1				
		2	3	3	2	4		2		
	4	3	5	3	3	5	3	2	2	
	9	4	8	5	6	5	4	4	3	4
	9	9	9	5	7	5	13	6	8	5
3 3	5	2	4	3	3	1	2	3	3	1
➔ 1 5 5 8	4	4	5	1	4	3	5	1	4	2
2 2 2 9 11	1	4	2	3	2	2	2	4	2	5
1 1 4 5 6 8	4	4	1	2	4	3	4	1	3	2
➔ 2 3 8 11	2	3	5	3	5	1	2	4	5	2
4 5	4	2	3	1	2	4	5	3	2	2
2 2 7	3	3	1	2	4	2	1	1	2	3
➔ 2 5 7	1	2	5	1	1	3	2	1	5	4
10 11	5	4	4	5	2	4	1	2	3	3
16	5	3	4	2	3	5	4	2	1	3



16. SUDOKAKURO (87 POINTS)

Place the digits from 1 to 7 in every row, every column and every bold outlined irregular area. The numbers in the dark grey cells are the sums of the digits in the reading direction.

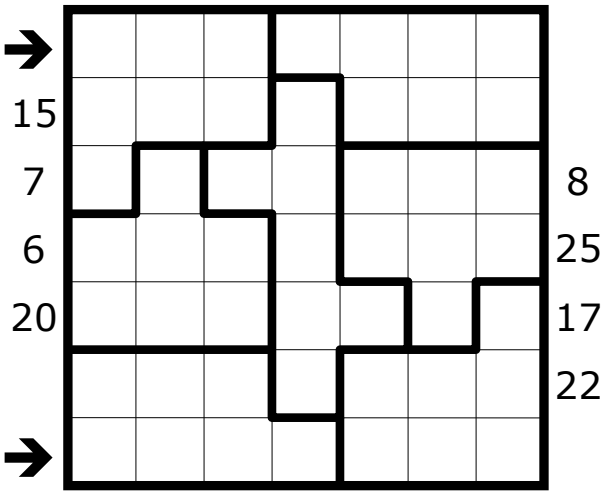
Answer key:
The content of the marked rows.



17. X-Sums Sudoku (18 Points)

Place the digits from 1 to 7 in every row, column and bold outlined area. Numbers outside the grid indicate the sum of the first X digits in the corresponding direction. X is the first digit in the corresponding direction.

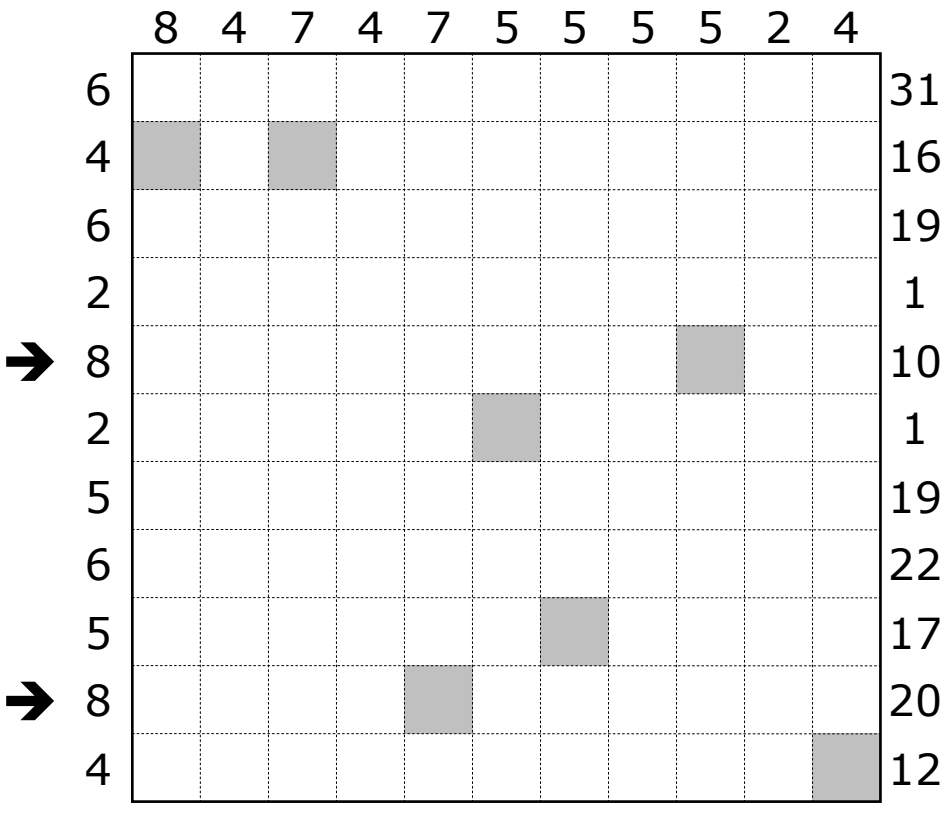
Answer key:
The digits in the marked rows.

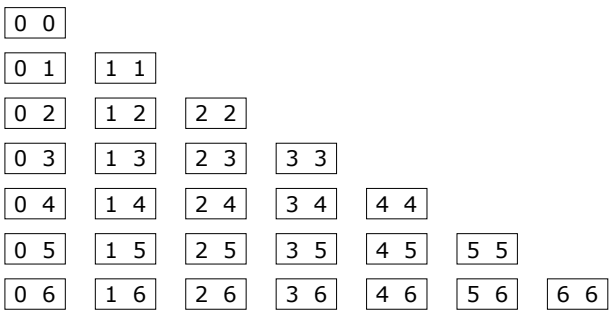


18. Domino Loop (81 Points)

Place the given domino tiles in the grid in such a way that they form a closed loop that does not touch itself, not even diagonally. The normal domino rules have to be followed: adjacent cells covered by different tiles contain equal digits. The numbers above and on the left of the grid represent the number of cells occupied by dominos in the respective row or column. The numbers below and on the right of the grid represent the sum of the digits on dominos in that row or column. The grey cells are part of a domino with two equal digits.

Answer key:
The content of the marked rows; '-' for empty cells.





19. PRIME DOMINO (35 POINTS)

The dominos 0-0 to 6-6 have been arranged to form a rectangle of 7 by 8 cells; after that the outlines of the domino tiles and some of the digits have been removed. Reconstruct the missing digits and lines in such a way that every domino appears exactly once in the diagram. The digits in the grey cells are part of a domino of which the sum of both digits is a prime number. (Relevant prime numbers: 2,3,5,7,11)

Answer key:
The missing numbers, row by row, top to bottom.

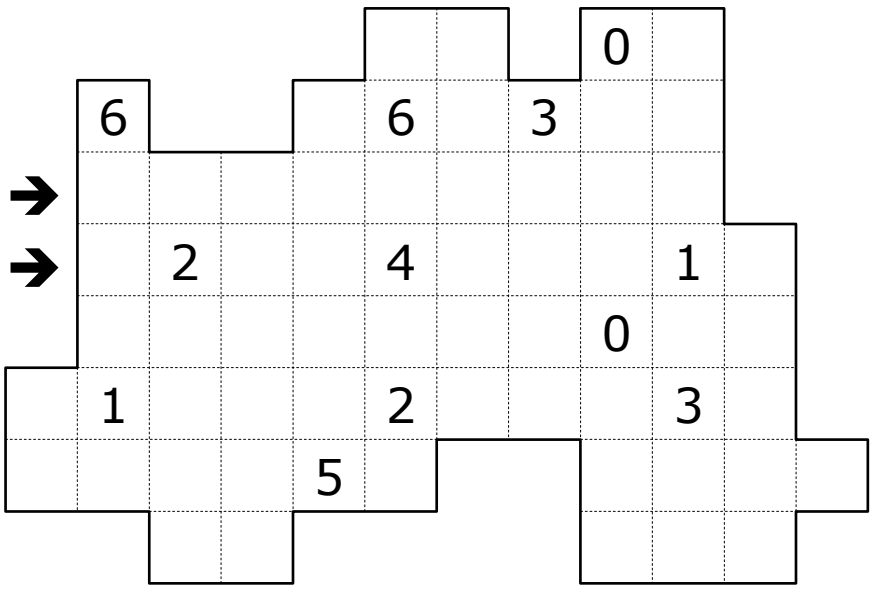
0					2	5	3
	0				4	1	3
1	5	4	1	5	5	3	4
5	0	6	4	5	4	3	2
3	4	3	2	3	0	5	6
	6		1	1	6	6	2
3		5	1	2		0	0

0 0
0 1 1 1
0 2 1 2 2 2
0 3 1 3 2 3 3 3
0 4 1 4 2 4 3 4 4 4
0 5 1 5 2 5 3 5 4 5 5 5
0 6 1 6 2 6 3 6 4 6 5 6 6 6

20. BLACKOUT DOMINO (75 POINTS)

Paint some cells black and place all given domino tiles in the grid in such a way that they don't overlap. Two orthogonal adjacent cells from different domino tiles must be equal. Black cells must not touch the border nor each other orthogonally.

Answer key:
The content of the marked columns; 'B' for black cells.



0 0
0 1 1 1
0 2 1 2 2 2
0 3 1 3 2 3 3 3
0 4 1 4 2 4 3 4 4 4
0 5 1 5 2 5 3 5 4 5 5 5
0 6 1 6 2 6 3 6 4 6 5 6 6 6