Total: 650 points + time bonus (5 pts/minute)

1. Snake in the Tents   (45 points)

The grid represents the site of a campground. Each tree is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column. A snake, consisting of 73 sequentially numbered horizontally or vertically connected squares, is hiding in the campground. Squares numbers 1 (the head), 25, 49 and 73 (the tail) are given. The snake does not loop back or touch itself, not even diagonally. The snake passes once through each tent, but it does not pass through any square containing a tree. Locate the tents and the snake.

	2	3	1	3	2	2	2	1	2	3	2	3
2	🌲						1					🌲
4			🌲	🌲		🌲				🌲		
1								🌲				
2			🌲				🌲			🌲		
3	🌲			🌲								
2				🌲				🌲	🌲			🌲
2					25							
2						🌲				🌲	🌲	
2		🌲										
1					🌲							49
3	73		🌲						🌲			
2			🌲				🌲					🌲
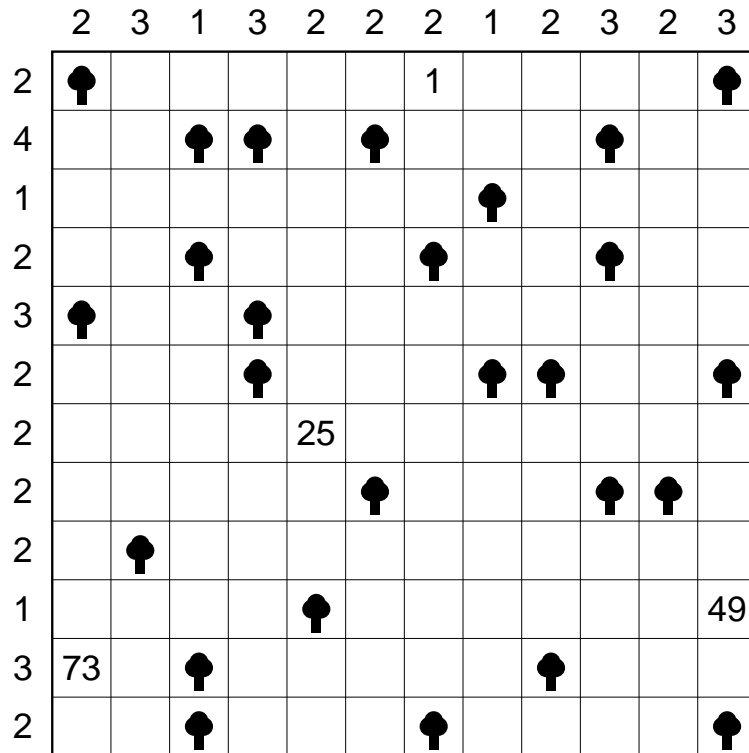
2. Word Kropki   (40 points)

Enter the given words into the grid crisscross style. Words must be formed by consecutive letters, one per square. Words must appear either across, from left to right, or down, from top to bottom. All words must interconnect. A white dot separates two squares whenever they contain letters whose ranks in the alphabet differ by 1. A black dot separates two squares whenever they contain letters whose ranks in the alphabet are exactly half of each other. The dot between adjacent squares containing "A" and "B" can be either white or black.
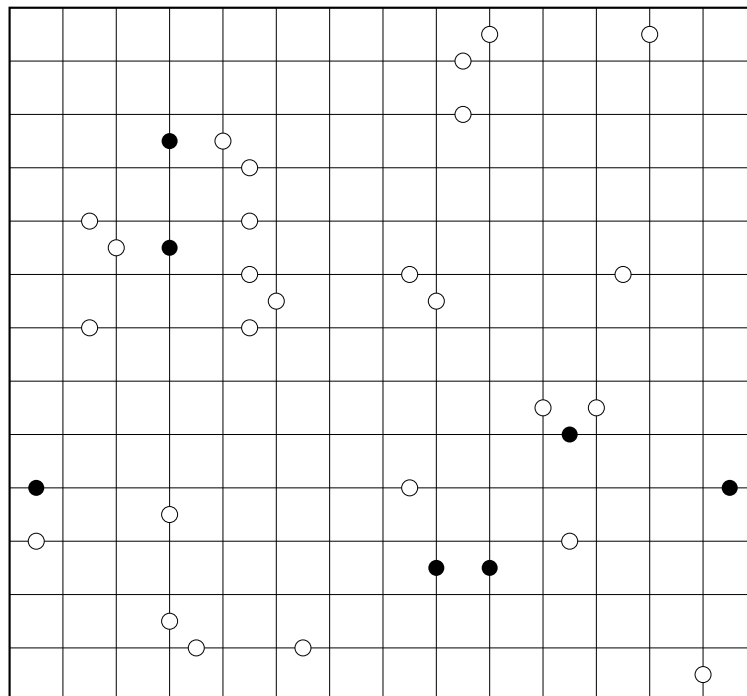
BIONIC	JETSKI	NORDIC
CABANA	KROPKI	PHOTO
CANAL	MEIJI	PIANO
CODE	MICRO	POLKA
CONGO	MNEMONIC	PORNO
GNOME	MONOPOL	STENO
IRISH	NEON	STUDIO

3. All Alone Fences   (30+45 points)

Black out some of the numbers in the grid so that each row and each column contains only different digits. Blackened clues must not touch horizontally or vertically, and the remaining squares must all be connected to each other.

Then, draw a single closed loop by connecting neighboring points horizontally or vertically. Each numbered square indicates how many of its four edges are used by the loop.

```
      0  0      3  3  2  1  0  2
         2      1  0            3
  0         2  0         3         0
  2  2  0  1      2  3  0  1
  1  0  3  0            1
               3  0  2  1  0
      0  1      0         3  3  1
  3  1  2  0                      2
  1            2      3  2  1  3
  2  1      0         0  3      1
```

```
         3      0  3  2      1  0
  0  2         3  1      2  0  3
  2  1      0            1  2
  3  1      2  0      1            2
     2      0  1  2  3  3         0
  1      0  3  2            0  1
  2  3            0         3         0
            2      1      2  0
     3  1                  1  3
  1  2  0      3  2      0         2
```

4. Battleships and Anglers   (40+100 points)

The grid represents a lake, in which the given battleship fleet is hidden. Ships are oriented either horizontally or vertically, and they do not touch each other, not even diagonally. The non-bold numbers outside the grid indicate how many ship segments lie in a given row or column. There are no ship segments in the cells that contain fish.

Anglers are standing around the lake, at each position with a bold number. Each angler catches one fish. Their fishlines always connect the centers of adjacent squares, and do not intersect. The numbers indicate the number of squares traversed by each fishline. The fishlines cannot pass through the cells occupied by battleship segments. Every cell of the grid is occupied by either a battleship segment or a fishline.

Fleet:
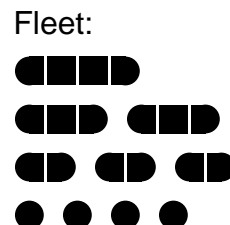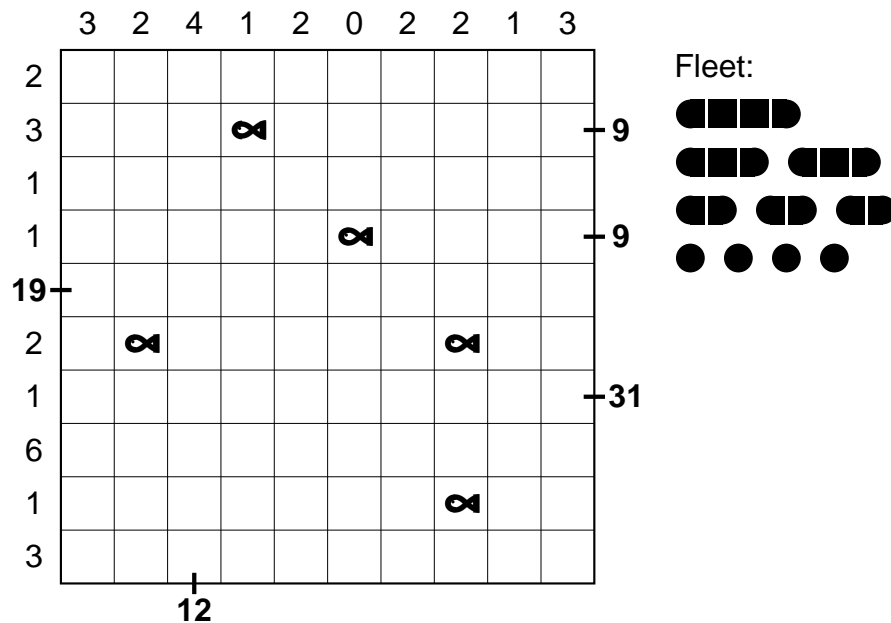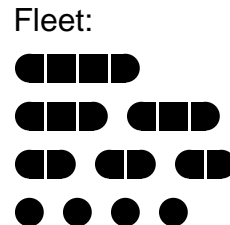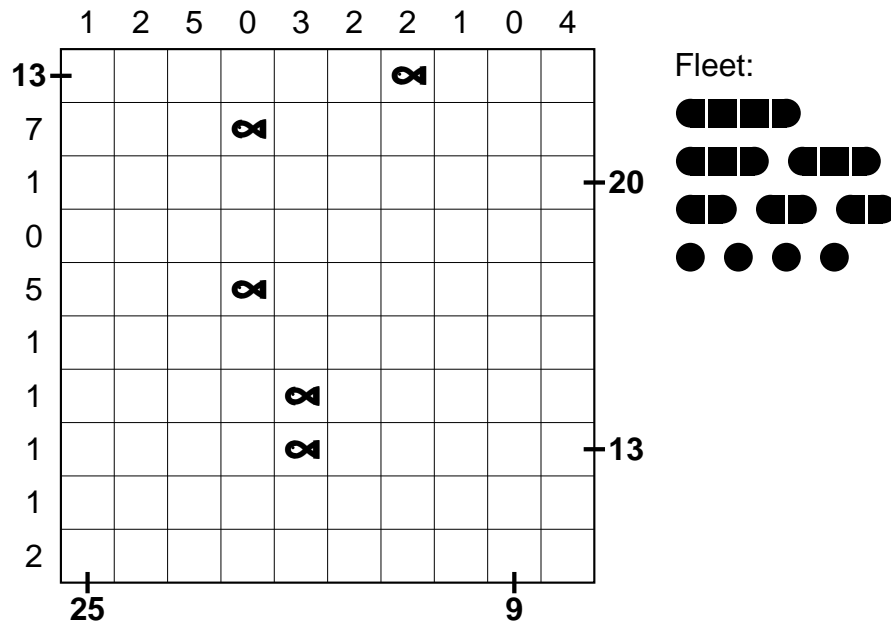
5. Killer Minesweeper Star Battle   (70 points)

Place two stars in each column and each row of the grid. Each highlighted region contains exactly one star. The stars do not touch each other, not even diagonally. The digits given in the grid indicate how many stars can be found among the eight neighboring squares.
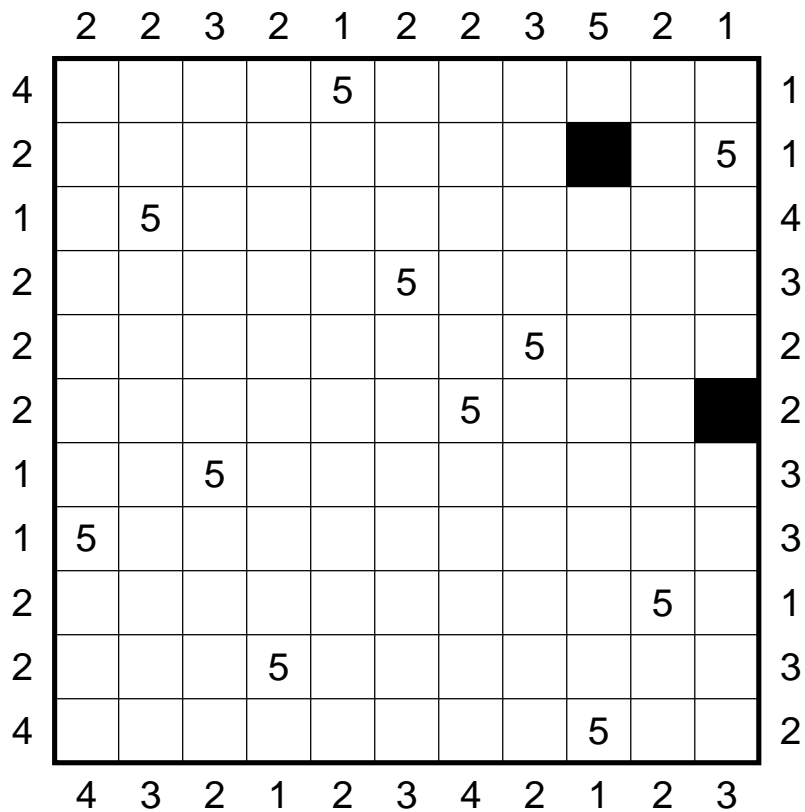
Then, fill the unoccupied cells with digits from 1 to 7, in such a way that each digit appears once in each column and in each row. Within each highlighted region, the digits are all different and their sum equals the given number.

6. Pentamino Island Skyscrapers   (80 points)

The grid consists of white areas (islands), surrounded by blackened cells which are linked together to form a continuous sea. Each island should contain exactly one of the given numbers, which is equal to its area. The islands may touch each other only diagonally. The sea cannot form any 2x2 square.

Each island is built up with skyscrapers, one in each square, all of different heights ranging between 1 and 5. Each value from 1 to 5 appears exactly once in each row and in each column of the grid. The numbers outside the grid indicate the number of buildings that can be seen by an observer looking into the grid from the corresponding direction, taking into account that higher buildings block the view of lower buildings from the observer.

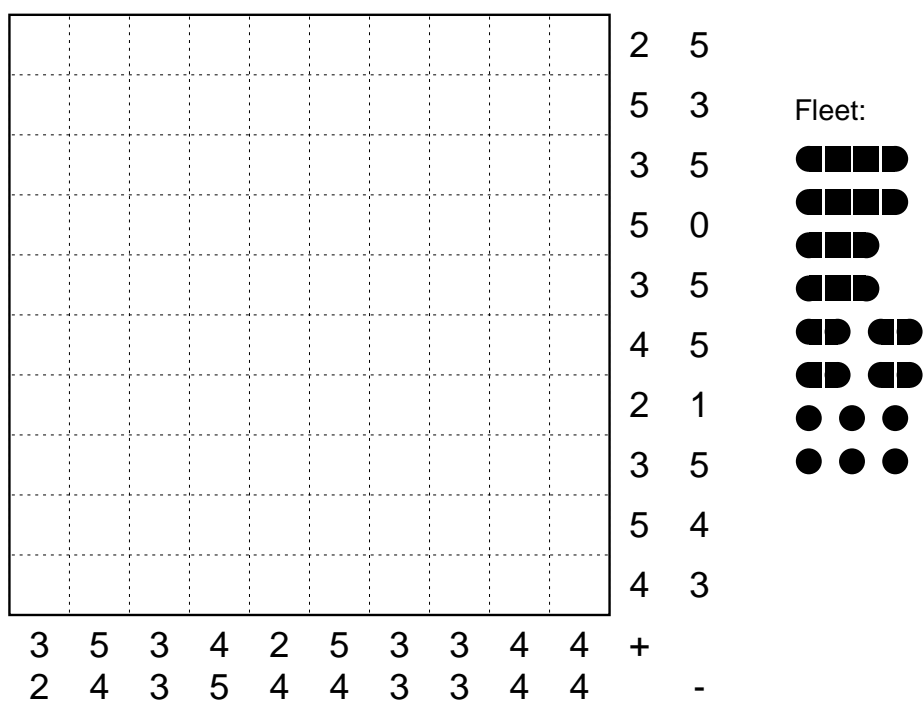|	2	2	3	2	1	2	2	3	5	2	1	
4					5							1
2									■		5	1
1		5										4
2						5						3
2								5				2
2							5				■	2
1			5									3
1	5											3
2										5		1
2				5								3
4									5			2
	4	3	2	1	2	3	4	2	1	2	3	

7. Japanese Magnetic Domino Cross-Sum Battleships   (200 points)

The given battleship fleet is hidden in the grid. Ships are oriented either horizontally or vertically, and they do not touch each other, not even diagonally. The remaining cells are occupied by dominoes. Each domino from the given set appears exactly once. Moreover, each domino is a magnetic plate, consisting of one positive half and one negative half. Halves with the same polarity cannot touch each other horizontally or vertically. The numbers to the right of the grid and below it indicate the number of magnetic halves in that particular row or column.

Finally, the sums of the numbers (with signs given by their polarity) in each consecutive group of magnetic halves are given, in order (left-to-right and top-to-bottom). No digit can be repeated within a row or column (irrespective of polarity). The sums in the across direction are given sequentially starting with the first row, then the second row, and so on until the last row. The sums in the down direction (vertically) are given sequentially starting with the first column, then the second column, and so on until the last column.

Partial credit: 60 points will be given for the correct location of the battleship fleet.

Right of grid (rows):
2 5
5 3
3 5
5 0
3 5
4 5
2 1
3 5
5 4
4 3

Fleet:

Below grid (columns):
| 3 | 5 | 3 | 4 | 2 | 5 | 3 | 3 | 4 | 4 | + |
| 2 | 4 | 3 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | - |

Domino set:
1 2
1 3 2 3
1 4 2 4 3 4
1 5 2 5 3 5 4 5
1 6 2 6 3 6 4 6 5 6
1 7 2 7 3 7 4 7 5 7 6 7
1 8 2 8 3 8 4 8 5 8 6 8 7 8
1 9 2 9 3 9 4 9 5 9 6 9 7 9 8 9

Across: 2, -4, -6, -1, 3, 6, -9, -1, -10, 9, 3, 7, 4, 8,
-1, -6, -19, -6, -4, 2, 7, 2, -5, 8, -5, 5, 5

Down: 4, 3, -6, 7, -2, 9, -4, 2, -7, -5, 6, -8, -5,
-2, 5, 0, -7, 2, -4, -3, 10, -1