Good Fences Make Sad and Disgusted Neighbors

Each of these villages has a fence running through it along the grid lines, forming a single continuous closed loop. Some of the inhabitants are really sad about the fence and will only tell you exactly how many of their neighbors are sad like they are. As to the others, they are so disgusted by everyone else, they’d rather just tell you on how many sides they are fenced off from their neighbors or from the outside world. But they really need your help – see how many of those sad people are being kept out of the loop!
Hashiwokakuro (Count your bridges)

It’s not quite *Waterworld* yet, but all we have left is just a bunch of circular islands on each continent. Fortunately, we have some good engineers. We are planning to connect the islands to each other by a network of straight line bridges. The bridges cannot cross each other or pass over islands, and can only be placed horizontally (East-West) or vertically (North-South). A pair of islands can be connected by at most two bridges. All the islands must be connected together in a single group.

Each island has a value equal to the total number of bridges that connect it to its neighbors. Diamond-shaped signs display, for each of the four directions (North, South, East, West), the sum of the values of the islands that lie in the given direction from the sign. Moreover:

- No value can be repeated within a single sum.
- The bridges cannot pass through the signs.

But one sign on each continent is no longer displaying numbers, and nobody remembers the whole layout anymore... How are we going to build the bridges?
And wait, I haven’t told you yet about our plans for an intercontinental network at planetary scale... It will be just the same, but on the whole planet!
Shoal Patrol

These shoals are truly minefields! But do not worry, a squadron of mine countermeasures ships (shown next to each grid) is on patrol.

The clues above and left of each grid indicate the number of ship segments present in each row or column of the grid. The ships can be placed horizontally or vertically. No two ships can touch each other, not even diagonally.

All the ship segments lie on a closed loop which runs through the grid without touching itself, not even diagonally. (In other terms: no two cells on the loop may touch, even by a corner, unless they are actually directly connected along the loop.)

Each ship segment indicates the number of mines present in the 8 neighboring cells. There are no mines in the cells traversed by the loop. The total number of mines in each minefield is given.

You may find it important to note that not every cell enclosed by the loop contains a mine. However, it was such a scramble to protect the ships’ identities on this secret mission that something might have gone missing...
Submarine Patrol

The fleet of submarines shown next to the grid is patrolling an underwater minefield. The clues next to the grid indicate the number of ship segments along the corresponding horizontal row of the grid. The cells containing segments of distinct ships cannot touch each other, not even by a corner. The ships can be placed in any of the three directions (horizontally or vertically).

All the ship segments lie on a closed loop which runs through the grid without touching itself: if two cells on the loop touch diagonally by an edge or a corner, then they must actually be two or three cells apart along the loop. Each ship segment indicates the number of mines present in the (up to 26) neighboring cells. There are no mines in the cells traversed by the loop. The total number of mines is given.