Overview: Maximize the difference in pieces between players in a modified game of checkers

Description: The future of the teleportation research is at stake! Due to personal differences, Krei and Callaghan can no longer work together on the project, but they have decided to play checkers for the rights to continuing the project. In order to ensure an even playing field, they play an altered version neither has played before:

1. Each piece can move one step diagonally in any direction if there is no obstruction in that direction. Pieces only move on black spaces, and red spaces are empty.
2. Each piece can jump over one of the opponent's piece to eliminate the opponent's piece from the board. Each piece can only jump once per turn.
3. Players move in alternating order.
4. A player wins when he has taken all of his opponent's pieces.

Each man has his own attachments to the project over the years, but Callaghan's investment is especially personally motivated. Because of this, he cannot bear the idea of losing, and he wants your help in determining how to best beat Krei at this game!

Given a number of turns that both players will make and a current layout of the board, he wants you to determine the maximum difference between the number of your pieces and the number of your friend's pieces after taking said number of turns, assuming that your friend is likewise trying to minimize this difference. His strategy would be to leverage this information in an attempt to maximize this difference and win the game. Can you help Callaghan win the rights to the portal research project?

Filename: checker.{java, cpp, c, cc, py}

Input: The input will contain n+2 lines, where the board is of size n x n.
The first line contains the number of turns k.
The second line contains the size of the board n.
The third to n+2th lines each contain n characters corresponding to a row in the board. The characters correspond to the following:

`*`: an empty black space in the board
`-`: a red space in the board
`x`: one of Callaghan's pieces
`o`: one of Krei's pieces

Output: Output a single integer, the maximum difference between the number of Callaghan's pieces and the number of Krei's pieces after both players have taken k turns.

Assumptions: $1 \le k \le 6$
$1 \le n \le 20$
Boards with a large number of pieces will have a fewer number of turns.

Sample Input #1:
```
3
5
*-*-o
-*-*-
*-x-*
-*-*-
*-*-*
```

Sample Output #1:

```
-1
```

Sample Input #2:

```
3
6
*-*-o-
-*-*-*
*-o-x-
-x-*-*
*-o-*-
-*-*-*
```

Sample Output #2:

```
0
```