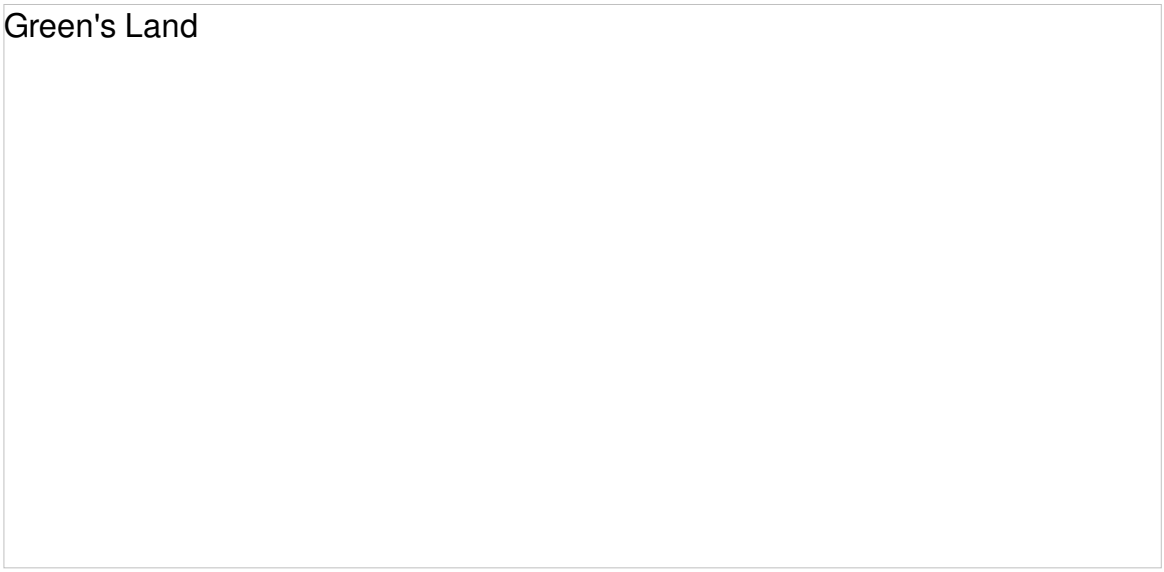
# Greens Land

Mr. Green has a large portion of land divided into square units that are either field or lake areas. He wants to fence a rectangular portion of his lands to use for livestock.
The lake areas have a very soft soil and any fence built near those areas have a chance to fall (and
then the animals could escape), so no fence should be built near a lake area.




Mr. Green wants to know of how many ways he can fence a rectangular area of his lands without any portion of the fence having a common border with a lake area.
In the example above, for a 3x3 land with a lake area in the center, we have 5 possibilities of fence.

## Input

On the first line a positive integer: the number of test cases, at most 100. After that per test case:
One line with a integer N ($1 \leq N \leq 300$): the size of the land (N xN ).
N lines, each with N characters. Each character is either '.' or 'X'. The j – th character on the i – th line is a 'X' if position (i, j) is a lake area, and '.' if it is a field area.

## Output

For each test case output a line with the number of different valid ways wich Mr. Green can fence his
lands.

## Example

**Input:**
4
3
...
.X.
...
3

X..
...
X..
6
......
......
......
......
......
......
5
.....
....X
.X...
.....
...XX

**Output:**
5
8
441
23