

Problem MACGYVER: MacGyver's greatest fans

As you might know, Patty and Selma Bouvier are maniacal fans of MacGyver, a TV-character played by Richard Dean Anderson. So when there was a Stargate SG-1 convention in Springfield, they took the opportunity, kidnapped Anderson and tied him to a chair. From there, he managed to escape... only to discover that he loves escaping, and started having Patty and Selma put him through increasingly complex MacGyver-esque kidnapping trials.

Input

The input starts with a line containing C , the number of testcases ($1 \leq C \leq 1000$). Each testcase consists of a labyrinth from which MacGyver has to escape. A labyrinth is a rectangular grid, where each grid square is either wall or open space. MacGyver is only able to walk between adjacent non-wall squares. Two squares are adjacent if they have one side in common.

Each labyrinth description starts with a line containing two integers, describing the number of rows and columns of the labyrinth. The labyrinth then follows one row on each line. '#' is used for walls, '.' for open space, 'M' is MacGyver's start position and 'X' is the exit. There will be exactly one 'M' and one 'X' in the labyrinth. The number of rows and columns in the labyrinth is at least 3 and at most 50.

Output

For each labyrinth, output "yes" (without quotes) if MacGyver can reach the exit square or "no chance without a Swiss army knife and a duct tape" otherwise.

Sample Input 1

```
2
3 3
#X.
.##
#M.
5 3
X..
##.
...
.##
..M
```

Sample Output 1

```
no chance without a Swiss army knife and a duct tape
yes
```