

Problem G: Trundling Object

There is a rectangular cube with dimensions $a \times b \times c$ on a $m \times n$ table (Face $a \times b$ of the cube is on the first a rows and first b columns of the table). Some of the cells of the table are blue and the others are red. You can trundle rectangular cube in one of the four directions up, down, left and right if:

1. It completely remains on the table.
2. There will be no red cell under the cube.

When the rectangular cube covers a cell, the color of that cell will be change to black. You should find the maximum number of blue cells that can be change to black.

Input

First line of Input contains the number of the tests.

Each test case consists of $(1 \leq a, b, c \leq 100)$ that shows the dimensions of the cube and $\max(a, b, c) \leq m, n \leq 100$ that shows the size of table. In the following m lines, in each line there are n characters that show the colors of the cells of the table.

Output

For each test case, output the maximum number of blue cells that can be turn to black.

Sample Input	Sample Output
3	2
1 1 1	2
3 3	7
BRB	
BRB	
RRR	
2 1 1	
3 3	
BRB	
BBB	
RRR	
2 1 1	
3 3	
BRB	
BBB	
BBB	

