

EXPERIENCE

1s

Little Potato Mine was working in a biology lab and encountered big trouble. His compartmentalized laboratory dish is a cube with dimensions $a \times b \times c$. For experimental convenience, it is divided into $a \times b \times c$ $1 \times 1 \times 1$ unit cube and (i, j, k) is used to define a unit cube.

The dish is not used for a long time. Now, Potato Mine is asked to clean several areas of the cube (each area can be cleaned multiple times). Little Potato Mine will use a specific bleach for cleaning. This bleach is especially strange: every time a rectangular cubic area of size $x \times y \times z$ (including $x \times y \times z$ cubic units) is cleaned, the amount of units of bleach required is $\min(x, y, z)$. The price of the bleach is not cheap, which makes Potato Mine feel uncomfortable.

Help him determine the minimum number of units of bleach needed.

INPUT

The first line contains the number of tests T ($T \leq 3$).

In each test: the first line contains 3 positive integers X, Y, Z describing the dimensions of the experimental dish ($X \times Y \times Z \leq 5000$).

Following that, there will be X 01 matrices with Y rows and Z columns describing the status of each unit block (0 means that the corresponding unit block does not require cleaning, and 1 means that the corresponding unit block needs to be cleaned): the number in the i -th row, j -th column of the k -th matrix describes the status of the unit block (i, j, k) .

OUTPUT

For each test, print on one line the minimum number of units of bleach needed.

Sample Input	Sample Output
1 4 4 4 1 0 1 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 1 1 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0	3

EXPLANATION

Cleaning the area $(1,1,3) - (2,2,4)$ and $(1, 1,1) - (4,4,1)$, costs 2 units and 1 unit of bleach.