Problem G: Give Me a Lot of Triangles

- Time Limit: 2 sec

Problem Statement

You have A_1 sticks of length 1, A_2 sticks of length 2, and A_3 sticks of length 3. You can perform the following operation any number of times:

- Choose 3 sticks such that they can form a triangle. Use these 3 sticks to make a triangle. Once used, these sticks cannot be used to form other triangles.

To "form a triangle", the lengths of the chosen sticks a, b, and c must satisfy the triangle inequality: $a + b > c$, $b + c > a$, and $c + a > b$.

Determine the maximum number of triangles that can be made.

Given T test cases, compute the answer for each.

Input

The input is given in the following format:

$$T$$
$$\text{case}_1$$
$$\text{case}_2$$
$$\vdots$$
$$\text{case}_T$$

Here, case_i denotes the i-th test case.

Each test case is given in the following format:

$$A_1 \ \ A_2 \ \ A_3$$

- $1 \le T \le 10{,}000$
- $0 \le A_i \le 10^8$
- All input values are integers.

Output

Output T lines. On the i-th line, output the answer for the i-th test case.

Sample Input	Sample Output
4 3 1 2 4 1 1 0 0 0 31415926 535897 93238462	2 1 0 41730095