

Namekooooooooo!

After the jungle adventure, the village people have collected some mushrooms in three types. **Red** (r), **Green** (g), **Blue** (b). There are recipes for eating those mushrooms safely:

3 **Red** mushrooms -> **Reddish** health soup

3 **Green** mushrooms -> **Green** tasty soup

3 **Blue** mushrooms -> **Sea-flavored** soup

1 **Red**, 1 **Green** and 1 **Blue** -> **Mixed mushrooms** soup

Villagers have no specific preference on type of soup. They hope they can use all the mushrooms collected.

Can you find the **maximum** number of safe soups they can make?

Input

On the first line of input, there is an integer N (≤ 100), representing the number of test cases.

In the next N line, there are three integers, r, g and b ($0 \leq r, g, b \leq 10^9$), representing the number of red, green and blue mushrooms.

Output

For each test case, output the maximum number of safe soups they can make.

Sample Input

Output for Sample Input

4	6
3 6 9	4
4 4 4	0
0 0 0	2
2 3 3	

Explanation: test case 2, they can make 4 **Mixed mushrooms** soup, or 1 **Reddish** health soup, 1 **Green** tasty soup, 1 **Sea-flavored** soup and 1 **Mixed mushrooms** soup. Both ways can produce 4 soups.