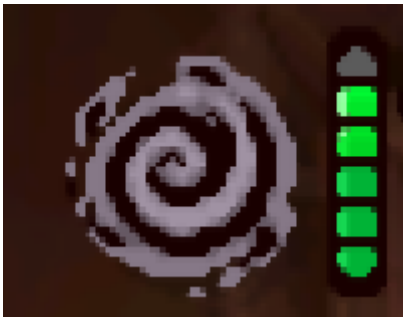# Recharge

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

The Binding of Isaac is a randomly generated action RPG shooter with heavy roguelike elements.

During the game, the player can pick up different items and cause different effects after being used, which adds a lot to the gameplay of this game. *Activated items* are a special category of items. Each activated item can be used once it is fully charged, thus a charge bar is used to denote the current charging progress. To charge an activated item, the player needs to clear the rooms: a small room fills 1 unit of the charge bar, while a large room fills 2 units of the charge bar. Specifically, for an activated item with only 1 unit uncharged, clearing a large room has the same impact as clearing a small room. Using the activated item will **empty** the charge bar.

The most powerful activated item in the game, *Void*, has a charge bar size of 6 units, with 5 units charged.

Now, Shuishui is holding an activated item with a charge bar size of k units. Initially, the charge bar is empty, and there are x uncleared small rooms and y uncleared large rooms on the map. Shuishui can choose to clear the uncleared rooms in arbitrary order. Please calculate the **maximum** number of times Shuishui uses the item.

Input

The input contains multiple testcases.

The first line contains an integer t ($1 \le t \le 2 \times 10^5$), denoting the number of testcases.

For each testcase, only one line contains three integers k, x, y ($1 \le k \le 10^9$, $0 \le x, y \le 10^9$).

Output

For each testcase, output a single integer in one line, denoting the answer.

Example

standard input	standard output
3 6 6 6 9 6 2 3 1 4	3 1 2