B. Counting Solutions of an Integer Equation

Problem

Given, \mathbf{n} , count the number of solutions to the equation $\mathbf{x}+2\mathbf{y}+2\mathbf{z}=\mathbf{n}$, where $\mathbf{x},\mathbf{y},\mathbf{z},\mathbf{n}$ are non negative integers.

The Input

There is at most 1500 inputs. Each input is **n** (**n**<1000001) on a single line.

The Output

For each input, output the number of solutions on a single line.

Sample Input

2

Sample Output

3

Problem setter: Josh Bao