# Pythagorean Triple Counting

There are already some SPOJ problems related to Pythagorean triples. Here is another one: Given an integer n, calculate the number p(n) of Pythagorean triples with at least one cathetus of length n.

## Input

Input starts with a positive integer $t \leq 1000$, the number of testcases.
Each of the following t lines contains a positive integer $n \leq 10^{15}$.

## Output

For every n print the value of p(n) in a single line.

## Example

**Input:**
3
4
5
6

**Output:**
1
1
1

**Explanation**: The only Pythagorean triple that has a cathetus with length 4 is (3,4,5), so p(4)=1.

***Note**: If you find the time limit too strict, you may first try the tutorial version with identical test data, but increased time limit. I also recommend to solve problems WPC5A and CATHETEN first.*