Project Euler #75: Singular integer right trangles

Problem Statement

This problem is a programming version of Problem 75 from projecteuler.net
It turns out that $12cm$ is the smallest length of wire that can be bent to form an integer sided right angle triangle in exactly one way, but there are many more examples.

$$12cm : (3, 4, 5)$$
$$24cm : (6, 8, 10)$$
$$30cm : (5, 12, 13)$$
$$36cm : (9, 12, 15)$$
$$40cm : (8, 15, 17)$$
$$48cm : (12, 16, 20)$$

In contrast, some lengths of wire, like $20cm$, cannot be bent to form an integer sided right angle triangle, and other lengths allow more than one solution to be found; for example, using $120cm$ it is possible to form exactly three different integer sided right angle triangles.

$$120cm : (30, 40, 50), (20, 48, 52), (24, 45, 51)$$

Given that L is the length of the wire, for how many values of $L \leq N$ can exactly one integer sided right angle triangle be formed?

Input Format
First line contains T that denotes the number of test cases. This is followed by T lines, each containing an integer, N.
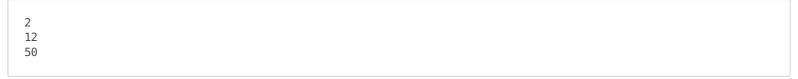
Constraints
$1 \leq T \leq 10^5$
$12 \leq N \leq 5 \times 10^6$

Output Format
Print the required answer for each test case.

Sample Input

```
2
12
50
```

Sample Output

```
1
6
```