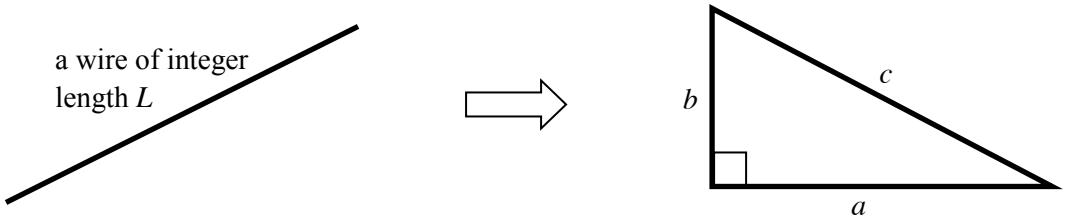
Pythagorean Triplet Triangle

(Time limit: 1 second)

Dave, a nerd but brilliant student always fascinated by a right triangle which every side of it has integer length, such triangle sometimes is called Pythagorean Triplet Triangle (PTT), since $a^2 + b^2 = c^2$ where *a*, *b*, and *c* are integers.



If Dave has a wire of length 12, he can make one PTT which sides are (3, 4, 5), but if he has a wire of length 120, he can make three possible PTT having sides: (30, 40, 50), (20, 48, 52), or (24, 45, 51). Suppose that Dave is given a wire of integer length *L*, then he will enjoy making many possible PTTs.

Your task is to compute the number of possible PTTs which Dave can make from a wire of integer length *L*.

Input:
Wire length L $(1 \le L \le 10^9)$.

Output:
Number of possible PTT.

Sample Input	Output for Sample Input
1 12 30 77 120 72000	0 1 1 0 3 12