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Joking with Fermat's Last Theorem

Input: Standard Input
Output: Standard Output

Fermat's Last Theorem: no three positive integers a, b, and c can satisfy the equation $a^n + b^n = c^n$ for any integer value of n greater than two.

From the theorem, we know that $a^3 + b^3 = c^3$ has no positive integer solution.

However, we can make a joke: find solutions of $a^3 + b^3 = c3$. For example $4^3 + 9^3 = 793$, so a=4, b=9, c=79 is a solution.

Given two integers x and y, find the number of solutions where x<=a,b,c<=y.

Input

There will be at most 10 test cases. Each test case contains a single line: x, y ($1<=x<=y<=10^8$).

Output

For each test case, print the number of solutions.

Sample Input	Output for Sample Input
1 10 1 20 123 456789	Case 1: 0 Case 2: 2 Case 3: 16

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