

**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  $a^3 + b^3 = c^3$ . 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  $x \leq a, b, c \leq y$ .

## Input

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

## Output

For each test case, print the number of solutions.

## Sample Input

```
1 10
1 20
123 456789
```

## Sample Output

```
Case 1: 0
Case 2: 2
Case 3: 16
```