A. System of Equations

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Furik loves math lessons very much, so he doesn't attend them, unlike Rubik. But now Furik wants to get a good mark for math. For that Ms. Ivanova, his math teacher, gave him a new task. Furik solved the task immediately. Can you?

You are given a system of equations:

You should count, how many there are pairs of integers (a, b) $(0 \le a, b)$ which satisfy the system.

Input

A single line contains two integers n, m $(1 \le n, m \le 1000)$ — the parameters of the system. The numbers on the line are separated by a space.

Output

On a single line print the answer to the problem.

Examples

input
9 3
output
1

input
14 28
output
1

input
4 20
output
0

Note

In the first sample the suitable pair is integers $(3, 0)$. In the second sample the suitable pair is integers $(3, 5)$. In the third sample there is no suitable pair.