

# Lattice Points Count

February 4, 2024

## 1 Problem Statement

Given a circle  $C$  centered at the origin with radius  $r$  and a straight line  $L$  defined by  $y = k$ , determine the number of lattice points strictly inside the circle  $C$  and strictly above the line  $L$ .

## 2 Constraints

1.  $1 \leq r \leq 10^6$
2.  $-10^6 \leq k \leq 10^6$
3. Both  $r$  and  $k$  are real numbers.

## 3 Input Format

$r$   $k$

example:

103.678 12.908

## 4 Output Format

Output a single integer.

example:

14291