

Coordinates

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given a point (x, y, z) in 3D space. Find the square of the distance from this point to the origin (i.e., to the point $(0, 0, 0)$).

Input

The first line contains one integer x ($-100 \leq x \leq 100$).

The second line contains one integer y ($-100 \leq y \leq 100$).

The third line contains one integer z ($-100 \leq z \leq 100$).

Output

Output one integer.

Example

standard input	standard output
1 -3 5	35