A Math Contest P6 - Global Maximum

Time limit: 0.5s **Memory limit:** 512M

You are given integers N and M. Among all real solutions (a, b, c, d) to the equations $a + b + c + d = N$ and $a^2 + b^2 + c^2 + d^2 = M$, what is the maximal value of d?

Constraints

$-10^3 \leq N \leq 10^3$

$0 \leq M \leq 10^6$

Input Specification

The only line contains two space-separated integers, N and M.

Output Specification

If there are no solutions, output `no`; otherwise, output the maximal value of d.

Your answer will be accepted if the absolute error is within 10^{-6}.

Sample Input

```
7 13
```

Sample Output

```
2.500000
```

Explanation for Sample

The maximal value of d is reached at $(a, b, c, d) = (1.5, 1.5, 1.5, 2.5)$.