Problem C
Consolidating Windows
Time limit: 1 second

In the 19th century, windows were a costly luxury in Delft, as you had to pay tax for every single window in your home. Only the wealthy people could afford more than a few, while many poorer residents bricked up some of their windows to avoid the enormous costs introduced by the new policy.

Not wanting to sacrifice any of the precious sunlight in her home, Corry came up with an ingenious idea: since the tax was based solely on the number of windows and not their size, she decided to install fewer but larger windows instead of many small ones. In each room, Corry had two square windows which she planned to replace by one single, square window to halve the tax. The area of this new window should equal the combined area of the two smaller ones. Given the side lengths of the two smaller windows, what is the side length of the larger window?

Bricked-up windows. CC BY 3.0 by Roger Veringmeier

Input

The input consists of:

- One line with two integers a and b ($1 \leq a, b \leq 10^9$), the side lengths of the two smaller square windows.

Output

Output the side length of a square window that has the same area as the two smaller windows combined.

Your answer should have an absolute or relative error of at most 10^{-8}.

Sample Input 1	Sample Output 1
3 4	5.0

Sample Input 2	Sample Output 2
10000000 320912	10005147.900543199866

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