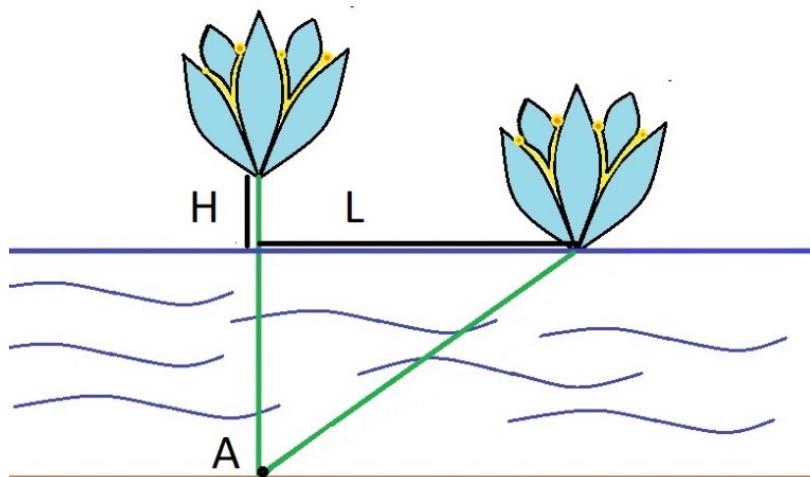


B. Water Lily

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

While sailing on a boat, Inessa noticed a beautiful water lily flower above the lake's surface. She came closer and it turned out that the lily was exactly H centimeters above the water surface. Inessa grabbed the flower and sailed the distance of L centimeters. Exactly at this point the flower touched the water surface.



Suppose that the lily grows at some point A on the lake bottom, and its stem is always a straight segment with one endpoint at point A . Also suppose that initially the flower was exactly above the point A , i.e. its stem was vertical. Can you determine the depth of the lake at point A ?

Input

The only line contains two integers H and L ($1 \leq H < L \leq 10^6$).

Output

Print a single number — the depth of the lake at point A . The absolute or relative error should not exceed 10^{-6} .

Formally, let your answer be A , and the jury's answer be B . Your answer is accepted if and only if $\frac{|A-B|}{\max(1, |B|)} \leq 10^{-6}$.

Examples

input	Copy
1 2	
output	Copy
1.500000000000	
input	Copy
3 5	
output	Copy
2.666666666667	

Codeforces Round #576 (Div. 2)

Finished

Practice



→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest](#)

→ Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

→ Submit?

Language: GNU G++11 5.1.0

Choose file: [浏览...](#)

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

[Submit](#)

→ Last submissions



Submission	Time	Verdict
58070088	Jul/31/2019 13:19	Accepted
58069992	Jul/31/2019 13:17	Wrong answer on test 4
58069769	Jul/31/2019 13:11	Wrong answer on test 2
58069756	Jul/31/2019 13:11	Compilation error

→ Problem tags

[geometry](#) [math](#)

No tag edit access

→ **Contest materials**

- Announcement (en) 
- Tutorial (en) 

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