

Problem I: Inconspicuous Identity

Time limit: 1 second

Last night, Rubeus Hagrid once again visited his giant half-brother Grawp in the forbidden forest. Unfortunately, when Grawp saw Hagrid's pink umbrella, he used it to chase barbaric bowtruckles in the trees. In this chaotic chase, Grawp unfortunately broke Hagrid's umbrella into pieces. Back in his homey hood, Ruben Hagrid wants to assemble a new umbrella. In the past, he only stored the broken pieces of his wand in it. However, he recently realized that members of the non-magic community mostly use umbrellas to protect them against the rain. In order to blend in and hide his true identity whenever he goes shopping to London, Hagrid wants his new umbrella to look exactly like any other umbrella.



Photo by Pascal Robert, Pixabay

The umbrella should consist of a straight wooden handle with 8 metal ribs of length x meters connected symmetrically to its top. Hagrid wants to attach the remaining non-stretchable, rainproof, pink fabric he found in his hood along the full length of the metal ribs, i.e. from the top of the umbrella where all ribs meet down to the very end of each metal rib. If the umbrella is opened all the way, the fabric between two metal ribs forms an isosceles triangle. Depending on the amount of fabric that is used, the umbrella can be opened more or less wide.

Hagrid has up to a square meters of non-stretchable, rainproof, pink fabric available for the umbrella. Since he is quite a corpulent man, he wonders what the maximum area is that the umbrella can keep dry if the rain falls perpendicular to the ground and there is absolutely no wind?

Input

The input consists of:

- One line with two real numbers a and x where
 - a ($0 < a \leq 10$) is the amount (in square meters) of non-stretchable, rainproof fabric that is available for the production of a single umbrella.
 - x ($0 < x \leq 5$) is the length (in meters) of a metal stick.

All real values are given with at most three decimal places.

Output

Print a single real value, the maximum area (in square meters) that can be kept dry. Your solution is considered correct if the relative and absolute error is less than 10^{-4} .

Sample Input 1

10.000 0.500

Sample Output 1

0.7071067812

Sample Input 2

10.000 5.000

Sample Output 2

1.2101397319

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