

Problem F. Regular Triangle Inside a Rectangle

Time limit 2000 ms

Mem limit 1048576 kB

Problem Statement

Find the maximum side length of a regular triangle that can be drawn within a rectangle whose side lengths are A and B .

Constraints

- $1 \leq A, B \leq 1000$
- A and B are integers.

Input

The input is given from Standard Input in the following format:

A B

Output

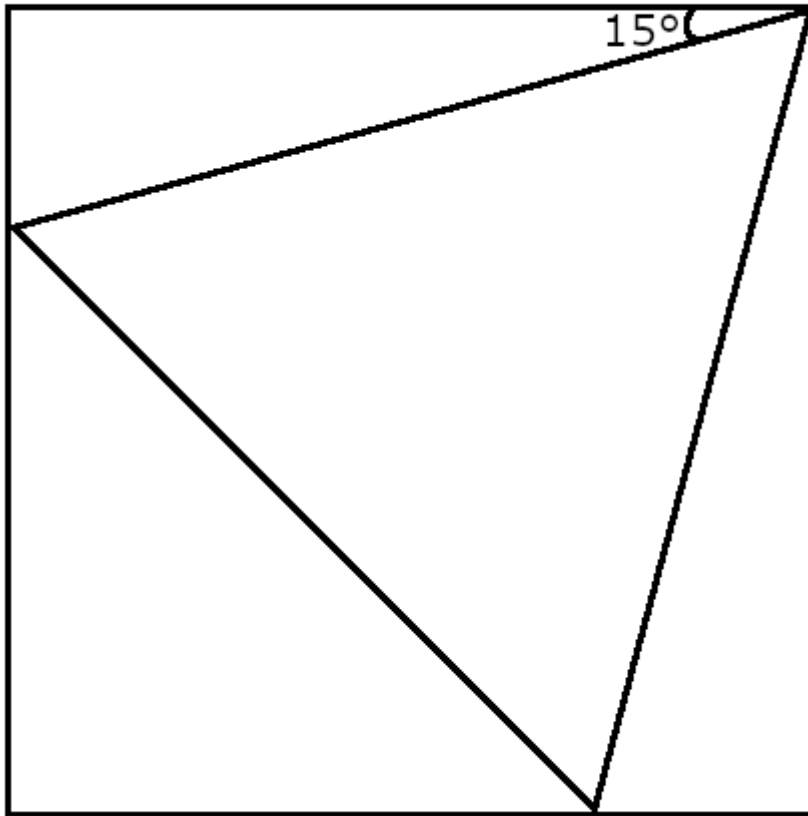
Print the answer.

Your output is considered correct if the absolute or relative error from the true answer is at most 10^{-9} .

Sample 1

Input	Output
1 1	1.03527618041008295791

The following figure shows an optimal drawing, with the side length of $\sqrt{6} - \sqrt{2}$.



Note that the sample output does not strictly match $\sqrt{6} - \sqrt{2}$, but the error is within 10^{-9} , so it is considered correct.