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

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

Input

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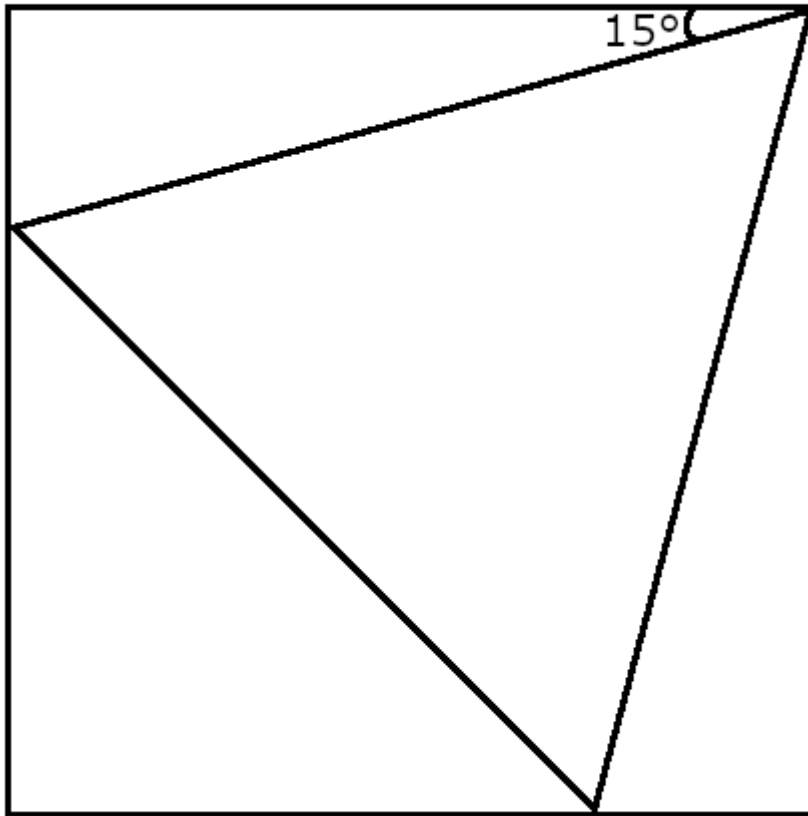
> A B

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.