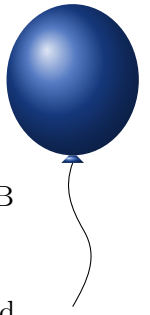


A Apple and Cinnamon



TIME LIMIT: 1.0s
MEMORY LIMIT: 1024MB

Alice is making a signature dessert that relies on a delicate harmony of two ingredients: apple and cinnamon. To achieve this, Alice reaches into a large, opaque canvas bag filled with flavor drops.

We know for certain that the bag contains at least X apple drops and at least Y cinnamon drops. However, there may be more drops of either flavor in the bag.

Among all possible final numbers of apple and cinnamon drops satisfying these lower bounds, Alice draws exactly two drops uniformly at random, without replacement. Alice's greatest hope is to draw one of each flavor, allowing apple and cinnamon to meet in a single trial dessert. Therefore, Alice wants to know the minimum possible probability of drawing two drops of the same flavor.

INPUT

The only line of the input contains two integers X and Y ($1 \leq X, Y \leq 10^9$) — the minimum required number of apple drops and cinnamon drops in the bag, respectively.

OUTPUT

Print one real number — the minimum possible probability that the two drawn drops have the same flavor.

Your answer will be considered correct if its absolute or relative error does not exceed 10^{-9} .

SAMPLES

Sample input 1	Sample output 1
3 5	0.44444444444444444444444444444444

Explanation of sample 1.

If the bag contains a apple drops and b cinnamon drops, the probability of drawing two drops of the same flavor is

$$\frac{a(a-1) + b(b-1)}{(a+b)(a+b-1)}.$$

For $X = 3$ and $Y = 5$, one optimal choice is $(a, b) = (4, 5)$, giving $\frac{4 \cdot 3 + 5 \cdot 4}{9 \cdot 8} = \frac{4}{9}$.

Sample input 2	Sample output 2
1 1	0.00000000000000000000000000000000

Explanation of sample 2.

With $X = Y = 1$, Alice can use exactly one drop of each flavor. Then every draw of two drops contains one of each flavor, so the probability of drawing two equal flavors is 0.

Sample input 3	Sample output 3
3971 1368	0.49993703563782898879