

The Mediant's Gamble

In a land where numbers rule the universe, three guardians a , b , and c stand in a strict order:

$$a < b < c$$

The Oracle of Probability challenges you:

*“Choose a number at random, young mathematician, from the sacred interval $[a, c]$. But beware! Your fate depends on whether your chosen number surpasses the legendary **Mediant of the Three**.”*

The **Mediant of the Three** is defined as:

$$M = \frac{a + b + c}{3}$$

Your quest is simple, yet perilous: determine the probability that a randomly chosen number from $[a, c]$ is **strictly greater** than M .

Input Format

Input Format

- A single line containing three real numbers a , b , and c , separated by spaces.
- It is guaranteed that:

$$-10^9 \leq a < b < c \leq 10^9$$

Constraints

Constraints

- The numbers are real-valued.
- Strict ordering: $a < b < c$.

Output Format

Output Format

- Print the probability as a floating-point number rounded to 6 decimal places.

Sample Input 0

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1 2 3
```

Sample Output 0

```
0.500000
```

Sample Input 1

```
0 2 5
```

Sample Output 1

```
0.648000
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