

# Mock CCC '18 Contest 1 J3/S1 - A Math Problem

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**Time limit:** 5.0s    **Memory limit:** 1G

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Given positive integers  $K$ ,  $P$ , and  $X$ , compute the minimum possible value of  $f(M) = MX + \frac{KP}{M}$  given that  $M$  must be a positive integer.

## Constraints

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$1 \leq K, P, X \leq 10\,000$

## Input Specification

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The input consists of a single line containing three space-separated integers  $K$ ,  $P$ , and  $X$ .

## Output Specification

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Print, on a single line, the minimum possible value of  $f$  subject to the above constraint, rounded to exactly three decimal places.

The input data will be set such that the correct answer will not be within  $10^{-5}$  of the aforementioned rounding boundary.

## Sample Input 1

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31 41 59
```

## Sample Output 1

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549.200
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## Sample Input 2

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```
3 4 5
```

## Sample Output 2

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16.000