Problem A
A Research Team

Time Limit: 1 second
Memory Limit: 256 megabytes

Phidang wants to build a research team at HCMUS. Thus, he proposes a simple problem to test the applicants in the interview when they want to join his team. The problem is about the total number of HCMUS students.

Phidang tries to estimate the total number of students in the following way in two days. On the first day, Phidang gives every student coming to the campus a sticker to put on their shirts, and he observes that there are n_1 students. On the second day, Phidang counts the number of students coming to the campus. He realizes that there are n_2 students who come to the campus, but only n_{12} students have the stickers. Assuming that the n_1 students on the first day still carry their stickers.

Now, you are a brilliant student in Statistics course and you want to join Phidang's research team, can you help Phidang to estimate the total number of HCMUS students using the Chapman equation below?

$$\widehat{N} := \left\lfloor \frac{(n_1 + 1)(n_2 + 1)}{n_{12} + 1} - 1 \right\rfloor$$

Input

The input contains three integers n_1, n_2, n_{12} on a single line.

Constraints:

- $0 \le n_1, n_2 \le 10^4$,
- $0 \le n_{12} \le \min(n_1, n_2)$

Output

The output contains a single integer $\widehat{N}$.

Sample Input

Sample Output

Sample Input	Sample Output
15 18 11	24