# 1961. Cantonese Dialect

Time limit: 1.0 second
Memory limit: 64 MB

After some thought on where to spend a holiday Vova decided to travel around South China and visit Guangzhou, Shenzhen, Macau and Hong Kong.

Vova heard that South China speaks the Cantonese dialect of the Chinese language. So before setting off he learned several simple phrases in Cantonese. During his first walk around the Guangzhou center Vova said hello to $n$ passers-by and $m$ of them responded. Vova concluded that the other $(n - m)$ passers-by, obviously, spoke the Mandarin dialect of the Chinese language.

After Vova finished his walk, he decided to evaluate $M$, the number of Guangzhou citizens who speak Cantonese. Wikipedia states that the city's population is $N$ people. Help Vova to find such $M$, which maximizes the probability that exactly $m$ out of $n$ random passers-by speak Cantonese.

## Input

The single input line contains integers $n$, $m$ and $N$ ($1 \le n \le N \le 10^8$; $0 \le m \le n$). Each of the $n$ passers-by was a Guangzhou citizen and met Vova exactly once during the walk.

## Output

Print the required $M$. If there are multiple values of $M$ maximizing the probability, print the largest of them.

## Sample

| input | output |
|---|---|
| 10 1 200 | 20 |

**Problem Author:** Alexander Ipatov
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