



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Soldier and Bananas

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

A soldier wants to buy W bananas in the shop. He has to pay k dollars for the first banana, 2k dollars for the second one and so on (in other words, he has to pay $i \cdot k$ dollars for the i-th banana).

He has n dollars. How many dollars does he have to borrow from his friend soldier to buy w bananas?

Input

The first line contains three positive integers k, n, w ($1 \le k$, $w \le 1000$, $0 \le n \le 10^9$), the cost of the first banana, initial number of dollars the soldier has and number of bananas he wants.

Output

Output one integer — the amount of dollars that the soldier must borrow from his friend. If he doesn't have to borrow money, output 0.

Examples

input	
3 17 4	
output	
13	

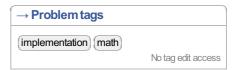
Codeforces Round #304 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest



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→ Contest materials

- Announcement
- Tutorial

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The only programming contests Web 2.0 platform
Server time: Nov/30/2016 19:20:14^{UTC+8} (c4).
Desktop version, switch to mobile version.