

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 ($1 \leq k, w \leq 1000, 0 \leq n \leq 10^9$), 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	Copy
3 17 4	
output	Copy
13	

Codeforces Round 304 (Div. 2)

Finished

Practice

→ 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 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

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU GCC C11 5.1.0

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
225746362	Sep/29/2023 10:26	Wrong answer on test 7
225746149	Sep/29/2023 10:23	Wrong answer on test 7
225028350	Sep/25/2023 08:12	Runtime error on test 1
225028041	Sep/25/2023 08:08	Runtime error on test 1
225027950	Sep/25/2023 08:07	Compilation error
224690072	Sep/23/2023 06:38	Accepted

→ Problem tags

brute force implementation math

*800

No tag edit access

→ Contest materials

Announcement (en)

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The only programming contests Web 2.0 platform
Server time: Oct/03/2023 11:35:04^{UTC+5.5} (k2).
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