CODEFORCES
Sponsored by Telegram

| takemhometonight | Logout

HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

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	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: Java 1.8.0_241

Choose file: Choose File No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

→ Last submissions

Submission	Time	Verdict
132489394	Oct/20/2021 07:02	Accepted
132489252	Oct/20/2021 06:59	Wrong answer on test 1

→ Problem tags

brute force | implementation | math | *800

No tag edit access

→ Contest materials

- Announcement (en)
- Tutorial (en)

Codeforces (c) Copyright 2010-2021 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Oct/20/2021 00:03:30^{UTC-4} (g2).
Desktop version, switch to mobile version.
Privacy Policy

Supported by