



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🖫 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Insomnia cure

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

«One dragon. Two dragon. Three dragon», — the princess was counting. She had trouble falling asleep, and she got bored of counting lambs when she was nine.

However, just counting dragons was boring as well, so she entertained herself at best she could. Tonight she imagined that all dragons were here to steal her, and she was fighting them off. Every k-th dragon got punched in the face with a frying pan. Every l-th dragon got his tail shut into the balcony door. Every m-th dragon got his paws trampled with sharp heels. Finally, she threatened every n-th dragon to call her mom, and he withdrew in panic.

How many imaginary dragons suffered moral or physical damage tonight, if the princess counted a total of d dragons?

Input

Input data contains integer numbers k, l, m, n and d, each number in a separate line $(1 \le k, l, m, n \le 10, 1 \le d \le 10^5)$.

Output

Output the number of damaged dragons.

Examples

input	
1	
2	
3	
4	
12	
output	
12	

input	
2	
3	
4	
5	
24	
output	
17	

Note

In the first case every first dragon got punched with a frying pan. Some of the dragons suffered from other reasons as well, but the pan alone would be enough.

In the second case dragons 1, 7, 11, 13, 17, 19 and 23 escaped unharmed.

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #105 (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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