Ghosts

Problem Statement

Do you believe in ghosts? Citizens of Byteland do. They want to estimate the population size of ghosts in their country.

There are A towns in Byteland. Every town consists of B streets. Each street has C houses. Finally, there are D apartments in each house. All the towns, streets, houses and apartments are numbered starting from 1. So, every apartment has a corresponding address described by 4 numbers.

A ghost lives in a particular apartment only if all the conditions below are true:

- The difference between the town number and the street number is divisible by 3.
- The sum of the street number and the house number is divisible by 5.
- The product of the city number and the house number is divisible by 4.
- The greatest common divisor of the city number and the apartment number is 1.

You are given the numbers A, B, C, and D. How many ghosts live in Byteland?

Input Format

The first line contains 4 space-separated integers: A, B, C, D.

Constraints

$1 \leq A, B, C, D \leq 60$

Output Format

Output the answer to the problem on the first line.

Sample Input

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4 4 4 4
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Sample Output

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8
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Explanation

Here are the addresses of all the ghosts:

- 1 1 4 1
- 1 1 4 2
- 1 1 4 3
- 1 1 4 4
- 4 1 4 1
- 4 1 4 3

- 4 4 1 1
- 4 4 1 3