City

You are in the CBD of Melbourne, desperately trying to find your next fix of bubble tea. In order to find a place that sells bubble tea, you decide to conduct a thorough search of the streets.

You know the street network of the CBD consists of $N(1 \le N \le 10000)$ roads running roughly east-west and $M(1 \le M \le 10000)$ roads running roughly north-south, forming a grid of $N \times M$ road intersections. All adjacent road intersections are spaced exactly $K(1 \le K \le 10)$ light-microseconds apart from each other.

Given N, M and K, calculate the total length of the streets in Melbourne's CBD, measured in light-microseconds.

Input

The first and only line of input will contain 3 space-separated integers: N, M and K.

Output

The only line of output should contain a single integer, the total length of the streets in Melbourne's CBD, measured in light-microseconds.

Sample Input 1

2 3 2

Sample Output 1

14

Explanation

In this example, there are 2 roads running east-west and 3 roads running north-south. This means there are 7 lengths of road running between the 6 intersections. As the intersections are spaced 2 light-microseconds apart, the total length is 14 light-microseconds.

Subtasks and Constraints

Do you really need them here?