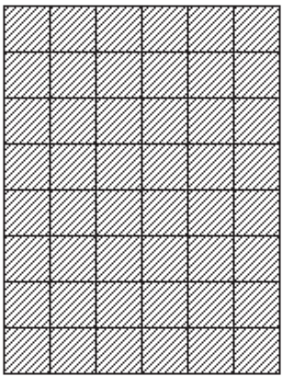
Problem F
Memory Mosaic
Time Limit: 1 second

Mid-Autumn Festival will be a great event with many beautiful scenes. Hugo decides that take a lot of photos at the Festival. Currently, he is preparing a large picture frame F of the size $N \times M$ with gridlines to display his favorite pictures taken at the Festival.

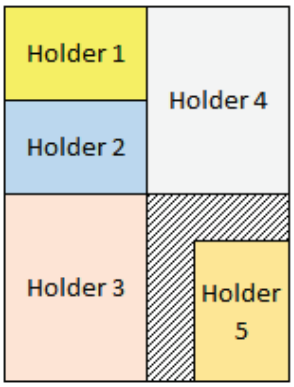
Hugo intends to put K picture holders on the picture frame F. Each picture holder has a rectangular shape and its dimensions are integers. A picture holder should not be rotated and should be aligned with the gridlines on the frame F. There is no occlusion between a picture holders and others.

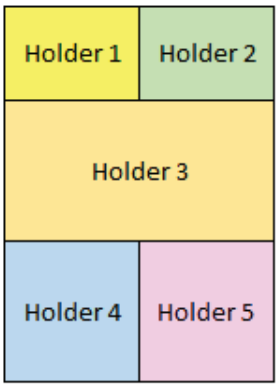
After selecting his favorite photos, he will put each of them into an appropriate picture holder on the frame. Then he will have a Memory Mosaic with his pictures.

Example:



An empty picture frame F of the size 7×6





Two different ways to put 5 picture holders on frame F. Regions with diagonal stripes are empty.

The question is how many different layouts of Memory Mosaic that Hugo can make?

Input

The input contains one line with exactly 3 integer numbers N, M, and K ($1 \le N$; $M \le 100$,

$1 \le K \le 5$), separated by a single space.

Output

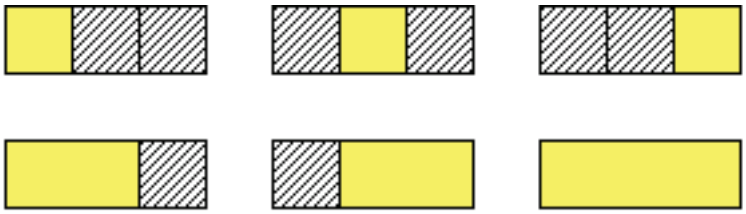
Display only one integer corresponding to the maximum number of layouts for K picture holders to be placed on the picture frame F.

Sample Input 1	Sample Output 1
1 1 2	0

Explanation: There are no ways to stick 2 picture holders on a frame with only one cell.

Sample Input 2	Sample Output 2
1 3 1	6

Explanation: There are 6 different ways to put one picture holder on a frame as below (cells with diagonal stripes are empty):



Sample Input 3	Sample Output 3
1 2 2	2

Explanation: There are 2 different ways to put two picture holders on a frame as below: