C. Table

The integer numbers from 1 to nm was put into rectangular table having n rows and m columns. The numbers was put from left to right, from top to bottom, i.e. the first row contains integers $1, 2, ..., m$, the second — $m+1, m+2, ..., 2*m$ and so on.

After it these numbers was written on the paper in another order: from top to bottom, from left to right. First, the numbers in the first column was written (from top to bottom) and so on.

Print the k-th number on the paper.

Input
The only line in the input contains three integer numbers n, m and k ($1 \leq n, m \leq 20000, 1 \leq k \leq nm$).

Output
Print the required number.

Examples

input
3 4 11

output
8

input
20000 10000 200000000

output
200000000