

## C. The World is a Theatre

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

There are  $n$  boys and  $m$  girls attending a theatre club. To set a play "The Big Bang Theory", they need to choose a group containing exactly  $t$  actors containing no less than 4 boys and no less than one girl. How many ways are there to choose a group? Of course, the variants that only differ in the composition of the troupe are considered different.

Perform all calculations in the 64-bit type: long long for C/C++, int64 for Delphi and long for Java.

### Input

The only line of the input data contains three integers  $n, m, t$  ( $4 \leq n \leq 30, 1 \leq m \leq 30, 5 \leq t \leq n + m$ ).

### Output

Find the required number of ways.

Please do not use the %lld specifier to read or write 64-bit integers in C++. It is preferred to use cin, cout streams or the %I64d specifier.

### Examples

<b>input</b>
5 2 5
<b>output</b>
10

  

<b>input</b>
4 3 5
<b>output</b>
3

### → 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 Beta Round #95 (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

### → Problem tags

combinatorics math

No tag edit access

### → Contest materials

- Announcement 
- Tutorial 