#include <iostream>

using namespace std;

int main() {

int n, i, x;

cin >> n >> i >> x;

int a=n-i;

int b= a-x;

int conw=1;

int f2 = 1, f4 = 1, f5 = 1;

for (int j = 1; j <= a; ++j) {

f2 \*= j;

}

for (int k = 1; k <= b; ++k) {

f4 \*= k;

}

for (int l = 1; l <= x; ++l) {

f5 \*= l;

}

conw = f2/f4 \* f5;

cout << conw << endl;

return 0;

}