



Currently, there are A rabbits and B hedgehogs in the forest. The forest ranger knows that during the last week C animals have disappeared. Write a program, which finds how many possible distributions for the number of animals before three days there are, if it is known that the number of rabbits was bigger than the number of hedgehogs. Two distributions are considered different if at least one of the three numbers (giving the number of the rabbits, hedgehogs and the missing animals) differs.

Input

The first line of the input file animal.in contains the numbers A, B \vee C.

Output

On the first file of the output file animal.out print a single number equal to the number of possible distributions.

Constraints

 $1 \le A, B, C \le 1000$

Examples

Input	Output
0 0 1	1
2 0 1	3
3 0 4	13

Explanation

The only possibility in the first example is {1, 0, 0}.

The three possible distributions in the second example are {2, 0, 1}, {3, 0, 0} and {2, 1, 0}. Note that in the first distribution, three days ago again there were 1 missing animal, whose type cannot be determined.