# A. Lengthening Sticks

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given three sticks with positive integer lengths of $a$, $b$, and $c$ centimeters. You can increase length of some of them by some positive integer number of centimeters (different sticks can be increased by a different length), but in total by at most $l$ centimeters. In particular, it is allowed not to increase the length of any stick.

Determine the number of ways to increase the lengths of some sticks so that you can form from them a non-degenerate (that is, having a positive area) triangle. Two ways are considered different, if the length of some stick is increased by different number of centimeters in them.

## Input

The single line contains $4$ integers $a$, $b$, $c$, $l$ ($1 \le a, b, c \le 3 \cdot 10^5$, $0 \le l \le 3 \cdot 10^5$).

## Output

Print a single integer — the number of ways to increase the sizes of the sticks by the total of at most $l$ centimeters, so that you can make a non-degenerate triangle from it.

### Examples

| input |
| --- |
| 1 1 1 2 |
| **output** |
| 4 |

| input |
| --- |
| 1 2 3 1 |
| **output** |
| 2 |

| input |
| --- |
| 10 2 1 7 |
| **output** |
| 0 |

## Note

In the first sample test you can either not increase any stick or increase any two sticks by $1$ centimeter.

In the second sample test you can increase either the first or the second stick by one centimeter. Note that the triangle made from the initial sticks is degenerate and thus, doesn't meet the conditions.