

Garden Hose

Our garden is a square containing plants in n rows and n columns, a total of $n*n$ plants. The distance between plants within a row is **rowDist** and between plants within a column is **colDist**.

I want to water the garden without getting my shoes muddy. That requires that I stand outside the garden, never closer than where the next row or column of the garden would be if it were enlarged. The hose can water plants that are **hoseDist** or less away from where I am standing. (Of course, I can move around and water from various locations.)

Given n , **rowDist**, **colDist**, and **hoseDist** as inputs, you must find and print the number of plants that cannot be watered.

Input Specification

The input will contain several test cases, each test cases will consist on a line containing n , **rowDist**, **colDist** and **hoseDist**, $1 \leq n, \text{rowDist}, \text{colDist} \leq 50$ and $1 \leq \text{hoseDist} \leq 10000$.

Output Specification

Print one line per test case with the answer, follow the format below

Input Example

```
3 2 1 2
3 2 1 1
4 50 2 2
4 50 2 4
4 3 2 3
```

Output Example

```
0
3
8
0
4
```