

Pyramid

Input File: pyramid.txt

You can build a very basic pyramid, by putting layers of 1 unit thickness squares on top of each other. For example, a pyramid of 3 levels, can be made by putting a 1 x 1 square on top of a 2 x 2 square on top of 3 x 3 square. Your job is to determine the volume of the pyramid of a given level. The example pyramid's volume is 14.

Input:

The first line contains an integer N. There are N following line, each consisting of an integer, defining the levels of the pyramid.

Output:

Output the volume of the pyramid of the given levels. Your output should be an integer.

Example Input:

```
3
1
4
100
```

Example Output:

```
1
30
338350
```