

## Triangled

### Problem :

Given an equilateral triangle with side length  $N$  divided into a triangular grid of triangles with side length 1, count the total number of triangles present in the grid.

For example, if  $N$  is 4:



Here there are ten right side-up and six upside down triangles with a side length of 1, six right side-up and one upside down triangles with a side length of 2, three right-side-up triangles with a side length of 3, and one right side-up triangle with a side length of 4. The total number of triangles is 27.

### Input :

The first line of the input contains an integer  $T$  denoting the number of test cases. The description of  $T$  test cases follows. Each test case contains the side length of the triangle.

### Output :

The output returns the total number of triangles contained in the large triangle.

### Sample :

**Input :**

1 //Number Of Test Cases

4

**Output :**

27

**Explanation :**

There are 27 triangles contained in the figure.

**Scoring :**

There will be 5 test cases, each valued 20 points.