Square Sums Input File: SquareIn.txt

Mathematician Ryan always liked producing numbers, and being a Texan he especially likes producing big numbers. Knowing this, you have decided to give him a program for his birthday that generates the value of the sum of the squares of the integers from 1 to n; $n \le 10^9$. For example, for n = 4 the sum would be 1 + 4 + 9 + 16 = 30.

Inputs:

The first line of input contains the number of values to compute. This will be followed a line that contains a the value of n to be used in each computation.

Output:

There will be one line of output per computation containing the computed value.

Sample inputs

3

4

3 123456

Sample outputs

30

14

627221052446816