

# As easy as possible

## Description

Another ACM-ICPC season has begun! As an ACM training class TA, hanhan always likes to help each team learn and enhance themselves.

During this semester, there is one practice contest each week. Sometimes, some team may be quite strong and keep ACing problems. Sometimes, some team may have a hard time and keep trolling every contest. Thus, to help these team find their confidence back, hanhan will propose some easy problem. When ACing these relative easy problem, a sense of accomplishment will fly in your heart and MAKE YOU GREAT AGAIN!

As an example, following is a relative easy problem. Try to solve it and grab the sense of accomplishment!

Given  $x$ , you should output  $f(x)$ , where

$$f(x) = \frac{x(x(x(182x-2721)+15396)-40707)+49546)}{24} - 903$$

## Input

The first line contains an integer  $T$  indicating the total number of test cases. Each test case contains one line with one integer  $x$ .

- $1 \leq T \leq 1021$
- $1 \leq x \leq 1021$

## Output

For each test case, output one integer  $f(x)$  in one line.

### Sample Input

5  
1  
2  
3  
4  
5

### Sample Output

1  
2  
5  
14  
42