Prana and The Series

Prana loves to find summation of any series. Today she has found one and now she is trying to find the sum of the first n terms.

The n^{th} term of the series is f(n).

$$f(n) = 1, \text{ when } n=1$$

$$f(n)= ((n-1)*(8*(n-2)* 2+ 20)+4) , \text{ when } n>1$$

Suddenly her baby cried for some reason. So now she has to take care of her baby. Now she needs your help to find out the sum of the first n terms of the series i.e. f(1)+f(2)+…….+f(n).

Input

The first line contains an integer T i.e. number of test cases. Next T lines will contain an integer n.

$T \leq 10^5$

$1 \leq n \leq 10^9$

Output

Print the values corresponding to each test case. As the sum will be huge you have to print the result mod (10^9+7).

Sample

Input	Output
3 1 2 3	1 25 101