

# DIAGONAL

You are given a  $n$  sided convex polygon. Find total number of intersections of all diagonals.

Assume that all the intersection points are different.

If in case answer exceeds  $10^9 + 7$ , take modulo  $10^9 + 7$

$1 \leq n \leq 10^8$

## Input

First Line :  $T$  (no of test cases)

Next  $T$  line will contain  $N$  no of vertices

## Output

No of intersections of diagonals as specified.

## Example

**Input:**

2

4

5

**Output:**

1

5