

cy Resurrection

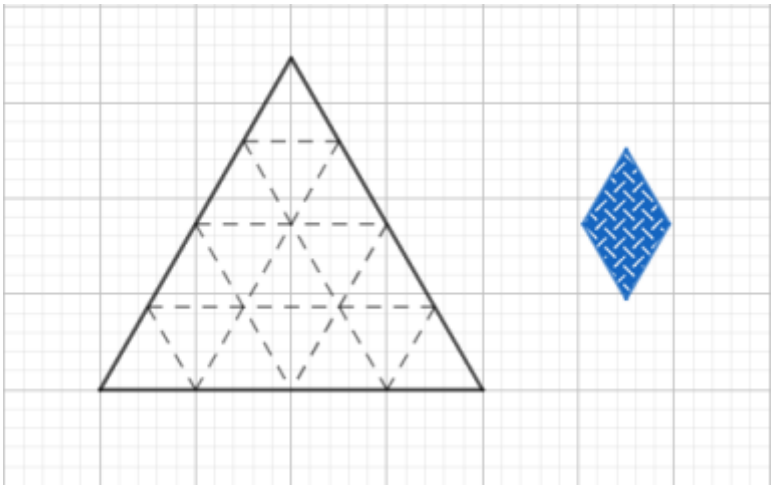
Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 512 megabytes

I am Qiqi. I am a zombie. And I forgot what comes next.

—Qiqi

Bubu Pharmacy has a storage area, which is a equilateral triangle formed with sides of length n . This storage area can be regarded as a triangle grid, which can be divided into many cells (each cell is a equilateral triangle formed with sides of length 1).

Qiqi (Aka. Nana) has many same boxes with diamond shape, and each of them can fill two adjacent cells in the storage area. The following picture shows a storage area with $n = 4$ and the shape of Qiqi’s box.



A storage area with $n = 4$, there are 16 cells in it; the shape of Qiqi’s box.

Now, Qiqi wants to put her boxes in the storage area. However, Qiqi finds that it’s impossible to completely fill the storage area with her boxes, there’re always some empty cells which can’t be filled with. Now, qiqi wants to calculate the minimum number of empty cells.

You need to answer Qiqi’s queries for T times.

Input

The first line contains a single integer T ($1 \leq T \leq 100$), which means Qiqi will query for T times.

In the following T lines, each line contains a single integer n ($1 \leq n \leq 100$) — the side length of the storage area.

Output

For Qiqi’s each query, output a single integer — the minimum number of empty cells. Output T Lines totally.

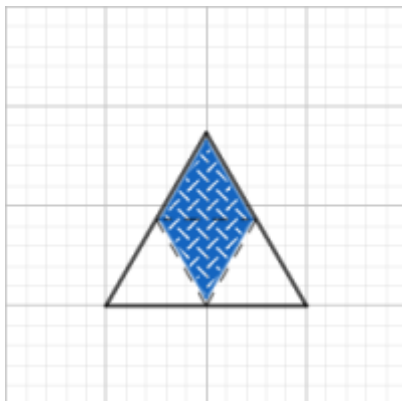
Example

standard input	standard output
3	1
1	2
2	4
4	

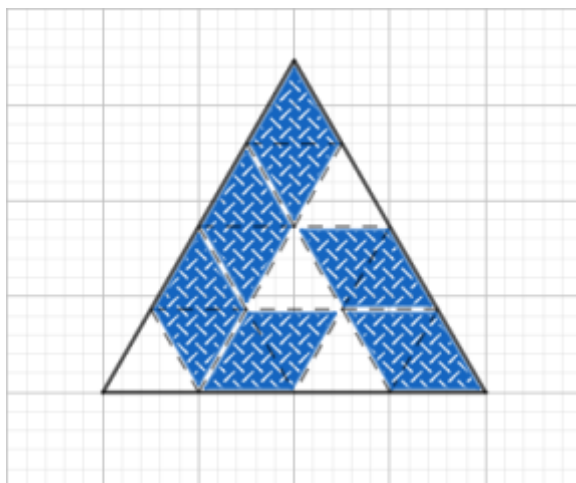
Note

In the first example ($n = 1$), it's impossible to put any box, so there are 1 cell left empty.

In the second example ($n = 2$), Qiqi can put 1 box at most, so there are 2 cells left empty. The following picture shows a way to put 1 box. There're also other ways to put 1 box but it can be shown it's impossible to put 2 boxes or more boxes.



In the third example ($n = 4$), Qiqi can put 6 boxes at most, so there are 4 cells left empty. The following picture shows a way to put 6 boxes. There're also other ways to put 6 boxes but it can be shown it's impossible to put 7 boxes or more boxes.



As is shown, boxes can be rotated, but shall not overlap with each other.

“Blessed” by the adepti with a body that cannot die, this petite zombie cannot do anything without first giving herself orders to do it. Qiqi’s memory is like a sieve. Out of necessity, she always carries around a notebook in which she writes anything important that she is sure to forget later. But on her worst days, she even forgets to look at her notebook...