B. Yummy Triangular Pizza

[Description]

Pizzahat has released a new pizza with triangular shaped pieces. This pizza is composed of some equal-sized equilateral triangle. Moreover, all the triangles are connected. Also, if two triangles are directly connected, they must share a common edge.

How many different shapes of this kind of N-pieces pizza are there? Two patterns are considered as same if they can completely overlap after rotation and shifting (note that flipping is not included).

[Input]

There are multiple test cases. The first line of input contains a single integer denoting the number of test cases.

For each test case, there is only one line with only one integer N denoting the number of pieces that can be used. (1 <= N <= 16)

[Output]

For each test case, output a single integer denoting the number of possible different shapes of the pizza.

[Sample Input]

```
3
2
4
10
```

[Sample Output]

```
Case #1: 1
Case #2: 4
Case #3: 866
```

