Bhutan is the only country in the world that has an indicator called "Gross Interior Happiness", which measures the quality of life of the population.

Now, they want to send a space rocket to Mars to measure the happiness of potential inhabitants of Mars.

The rocket to Mars increases its speed from 0 to the maximum speed. At this point, it starts to decelerate gradually from maximum speed to 0, instant at which it lands. But the budget to build the rocket is low. It has a speedometer that only detects odd speeds.

An example of the speed changes is: 0, 1, 3, 5, 7, 9, 7, 5, 3, 1, 0. The cost of moving from speed i to j is j million ngultrums, which is the currency in Bhutan.

Bhutan space agency wants to know the total cost of sending the rocket to Mars.

Input

The first line of the input contains an integer, t, indicating the number of test cases.

For each test case, there is a line with an odd number, s, with $1 \le s \le 10^9 + 1$, indicating the maximum speed reached by the rocket.

Output

For each test case, the output should consist of one line showing the total cost of sending the rocket to Mars, in millions ngultrums.

Sample Input

4

1

3

7

11

Sample Output

1

5

25

61