

Visible Lattice Points

Consider a $N*N*N$ lattice. One corner is at $(0,0,0)$ and the opposite one is at (N,N,N) . How many lattice points are visible from corner at $(0,0,0)$? A point X is visible from point Y iff no other lattice point lies on the segment joining X and Y .

Input :

The first line contains the number of test cases T . The next T lines contain an interger N

Output :

Output T lines, one corresponding to each test case.

Sample Input :

3
1
2
5

Sample Output :

7
19
175

Constraints :

$T \leq 50$

$1 \leq N \leq 1000000$