

A. Rocket Fuel

Program:	rocket.(cpp java)
Input:	rocket.in
Balloon Color:	Light blue

Description

A new material is discovered and can be used as fuel to send rockets into far space. This material however, has unique characteristics. It can thrust the rocket in acceleration such that the speed increases from 0 to the maximum speed, then deaccelerate gradually from maximum speed to 0, when the rocket lands at target planet. Every time the rocket speed is increased or decreased into a new speed value S , the rocket consumes S grams of fuel from this material. The rocket starts at the speed of 0, then 1 unit, and after that every step it increases by 3 until it reaches the maximum required speed n , then it immediately starts decreasing by 3 until it reaches 1, then 0 for landing. Rocket scientists calculate the maximum speed the rocket must reach in order to land correctly at the target planet, and your task is to calculate the amount of fuel needed in grams.

Example

In order to send a rocket to the moon, $n = 16$, so the speed changes as follows:

0 1 4 7 10 13 16 13 10 7 4 1 0

Fuel needed = $0 + 1 + 4 + 7 + 10 + 13 + 16 + 13 + 10 + 7 + 4 + 1 + 0 = 86$ grams.

Input

The input consists of several sequences of numbers terminated by 0, each one on a separate line and represents the maximum rocket speed, where $4 \leq n \leq 4000000000$, note that $n = 3*k + 1$, where $k = 1, 2, 3, \dots$. Input is terminated by a sequence having $n = 0$, which should not be processed.

Output

For each sequence, you are to output one line, containing the required fuel in grams.

Sample Input / Output

rocket.in

4
7
22
16
0

OUTPUT

6
17
162
86