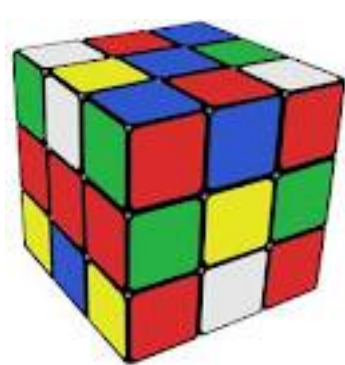


### 3392 - Factory of Painted Wooden Toys

#### Description

The International Consortium for Protection of Children's (ICPC) has a big toy factory. Toys are built from several materials such as iron, aluminum, wood, plastic, glass, etc. Last month, the factory created a new toy that is well-liked by many children. These toys consist of a wooden cube with side length equal to  $N$  centimeters. The surface is completely painted with multiple random colors such that the toy has a stylish color combination.



Furthermore, the wooden toys are cut to little cubic pieces of one centimeter on each side (volume of each little cube is 1 cubic centimeter). For instance, a toy of side 3 centimeters long would be cut into exactly 27 little cubes. Your task is to find how many of these little cubes have exactly two painted faces.

#### Input specification

Input consists of several test cases, but no more than 1000. Each case consists of a line with an integer number  $N$  ( $1 \leq N \leq 5 \cdot 10^3$ ) representing the side length in centimeters of the toy. The last line of input is followed by a line containing a zero, which should not be processed.

#### Output specification

For each case, output a line with an integer representing the number of little cubes that have exactly two painted faces cut from the initial cube.

## Sample input

1  
3  
0

## Sample output

0  
12

## Hint(s)

Source	Yonny Mondelo Hernández
Added by	<b>ymondelo20</b>
Addition date	2015-10-14
Time limit (ms)	5000
<b>Test limit (ms)</b>	1000
Memory limit (kb)	268435456
Output limit (mb)	64
Size limit (bytes)	16384
Enabled languages	Bash C C# C++ C++11 Java JavaScript-NodeJS Pascal Perl PHP Prolog Python Ruby Text