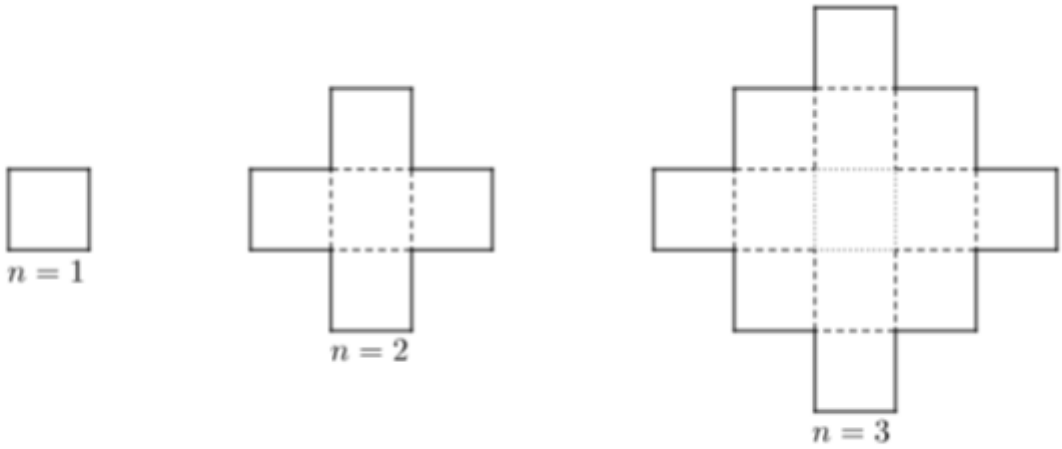
Problem H. Alex and a Rhombus

Time limit 1000 ms
Mem limit 262144 kB

While playing with geometric figures Alex has accidentally invented a concept of a n-*th order rhombus* in a cell grid.

A 1*-st order rhombus* is just a square 1×1 (i.e just a cell).

A n*-th order rhombus* for all $n \geq 2$ one obtains from a $n - 1$*-th order rhombus* adding all cells which have a common side with it to it (look at the picture to understand it better).



Alex asks you to compute the number of cells in a n*-th order rhombus*.

Input

The first and only input line contains integer n ($1 \leq n \leq 100$) — order of a rhombus whose numbers of cells should be computed.

Output

Print exactly one integer — the number of cells in a n*-th order rhombus*.

Sample 1

Input	Output
1	1

Sample 2

Input	Output
2	5

Sample 3

Input	Output
3	13

Note

Images of rhombus corresponding to the examples are given in the statement.