A. Pentagonal numbers

Pentagonal numbers are figurate numbers which can be calculated using the formula $p_n = (3n^2 - n) / 2$ (always integer). You are given n; calculate n-th pentagonal number.

Input

The only line of input contains an integer n ($1 \leq n \leq 100$).

Output

Output the n-th pentagonal number.

Examples

input
2

output
5

input
5

output
35