

A. Pentagonal numbers

time limit per test: 3 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

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