

B. Star

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Input

The input contains a single integer a ($1 \leq a \leq 18257$).

Output

Print a single integer $output$ ($1 \leq output \leq 2 \cdot 10^9$).

Examples

input
2
output
13