

Grandchildren

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Cossack Vus has exactly x sons. Each of his sons has exactly $(x + 1)$ sons. And each of his grandsons has exactly $(x + 2)$ sons.

Determine how many great-grandsons Cossack Vus has?

Input

The first line contains a single integer x ($1 \leq x \leq 100$).

Output

Output a single integer — the answer to the problem.

Example

standard input	standard output
2	24