

Hard Problem

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Input

Multiple test cases. Each contains a single integer N ($1 \leq N \leq 50$). Input terminates by EOF.

Output

For each test case, output one line contains the answer. See the example.

Example

Input:

8

9

10

Output:

$8=90*(0+0+0+0+45-3+20-42+60+10)$

$9=20*(0-3+10-14+15+2+0+0+0+0+10)$

$10=66*(0+0+0+0+0+33+5-33+66-66+55+6)$