AddThemUp
Input File: AddThemUp.txt

A sequence of numbers is defined recursively as:

The first number in the sequence, $N_1 = 1$
The second number in the sequence, $N_2 = 2$
Any other number in the sequence ($i \neq 1$ or 2), $N_i = N_{i-2} - N_{i-1}$

Thus, the first eight numbers in the sequence are 1, 2, -1, 3, -4, 7, -11, 18.

Write a program to calculate the *sum* of the first n terms in this sequence, for $1 \leq n \leq 46$.

Inputs
The first line will contain the number of sums to calculate. This will be followed by the number of terms in the sequence that will be included in the sum.

Outputs
Output the sums of the terms of the sequence, one sum per line.

Sample input
5
3
6
9
12
46

Sample output
2
8
-14
80
969323033

C