



# Problem of the Week

## Problem D

### Sum It

A sequence of non-negative integers is formed in the following way: the first two terms of the sequence are defined, and then each term after the second term is the sum of all previous terms in the sequence.

For example, if the first two terms of the sequence were 2 and 8, the next four terms of the sequence would be 10, 20, 40 and 80.

A sequence is formed as described above such that the first term is 3 and some other term in the sequence is 3072. How many such sequences are there?

