



## Problem of the Week

### Problem C

#### Teacher Road Trip 1

To help pass time on a long bus ride, 35 math teachers created a sequence of numbers, with each teacher saying one term in the sequence. The first teacher said the number 2, the second teacher said the number 8, and every teacher after that said the sum of the two previous terms. Thus,

- the third teacher said the sum of the first and second terms, which is  $2 + 8 = 10$ , and
- the fourth teacher said the sum of the second and third terms, which is  $8 + 10 = 18$ .

Once the final teacher said their number, the 25<sup>th</sup> teacher announced they had made a mistake and their number should have been one more than what they had said. How much larger should the final teacher's number have been?

