Problem 1. Let $G_n$ be the sum of the first $n$ Fibonacci numbers. Write down a formula for $G_n$.

Bonus Can you find a recurrence satisfied by $G_n$?

Problem 2. Prove that $F_n$ is even if and only if $n$ is divisible by 3.

Problem 3. How many numbers are there between 1 and 1000000 which don’t have a 2 in their expansion base 3?

Problem 4. Find the area of the triangle in the plane with vertices $(0, 0)$, $(2, 3)$, and $(2, 1)$.

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