Problem 5 (due Monday, November 6)

Let (f_n) be the Fibonacci sequence: $f_1=f_2=1$, $f_{n}=f_{n-1}+f_{n-2}$ for all $n>2$. Prove that for every odd $n\geq 3$ the polynomial $\ \ x^{n}+f_{n}x^2-f_{n-2}\ \ $ is divisible by x^2+x-1.

Each of the submitted solutions is similar to one of our four in-house solutions. For details see the following link Solution.