PROBLEM OF THE WEEK 23

Due Wednesday, April 17 at 5:00 pm

Question. Let F_n denote the Fibonacci sequence with $F_0 = 0$, $F_1 = 1$ and $F_n = F_{n-1} + F_{n-2}$ for all $n \geq 2$. Prove that

$$F_{2n} = F_{n+1}^2 - F_{n-1}^2$$

for all $n \geq 1$.

- All answers should be clearly explained. Submit it to the Math/Stat Office, AMB 107.
- If your instructor gives you credit for POTW, write his/her name with the class number.
- Contact Bahattin Yildiz with questions: bahattin.yildiz@nau.edu (AMB 134)
- The problems are available online at https://naumathstat.github.io/problem-of-the-week/

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