

On Lucas Sequences of the First Kind With Finitely Many Primes

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We strengthen a result of Jones by showing that for any integer $P \geq 1$, the Lucas sequence $\{U_n\}$ defined by $U_0 = 0$, $U_1 = 1$, $U_n = P \cdot U_{n-1} + U_{n-2}$ can be translated by a positive integer $K(P)$ such that the shifted sequence with general term $U_n + K(P)$ contains no primes, nor terms one unit away from a prime.