Abstract

A second order polynomial sequence $L_n(x)$ is of Lucas-type if its Binet formula has a structure similar to Lucas numbers. This sequence partially satisfies the strong divisibility property [1]. Thus, $\gcd(L_n(x), L_m(x))$ is 1, 2, or $L_{\gcd(n,m)}(x)$. In this paper, we give a short, simple, and different proof of this property.