R. S. Melham

Abstract

In this paper, we present the results of our investigation into a two parameter Pell Diophantine equation. With certain constraints on the two parameters, we present the positive integer solutions of the Pell equation in question. Indeed, assuming these constraints, we express the positive integer solutions in terms of a second order recurring sequence. For certain values of the parameters, the Pell equation in question reduces to a classic Pell equation, whose solutions are expressed in terms of Fibonacci and Lucas numbers.