Gabriela N. Stănică and Pantelimon Stănică Recurrences for Entries of Powers of Matrices, Fibonacci Quart. **55** (2017), no. 5, 166–173.

Abstract

In this note, giving course to a challenge in a recent paper of Larcombe [2], we find the entries of any *n*th power of a 3×3 matrix, and as a byproduct, we recover Larcombe's result on 2×2 matrices. Further, we look at block matrices and show an invariance result for the powers of such matrices.