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 $3 \times 3$ matrix, and as a byproduct, we recover Larcombe's result on $2 \times 2$ matrices. Further, we look at block matrices and show an invariance result for the powers of such matrices.

