
ON MULTIPLICATIVE TRIBONACCI NUMBERS AND THEIR LINEAR ALGEBRA

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ABSTRACT

The purpose of this work is to study the multiplicative Tribonacci numbers and investigate some of their associated properties, using an approach based on a matrix method. More precisely, we construct the multiplicative Tribonacci numbers and give their miscellaneous properties, like the Cassini formula and the Simpson formula. In addition, our approach allows us to get an efficient method for computing the n -th multiplicative Tribonacci numbers, by using a matrix method and a special sequence of multiplicative Tribonacci numbers.

Keywords Tribonacci numbers, Multiplicative Tribonacci numbers, Matrix method, Generating matrix, Cassini identity

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