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NUMBER OF SPANNING TREES OF CORONA OF SOME SPECIAL GRAPHS

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Abstract

The number of spanning trees in graphs (networks) is an important invariant, it is also an important measure of reliability of a network. In this paper we derive simple formulas of the complexity, number of spanning trees, of corona of some special graphs in terms of Lucas numbers and Fibonacci numbers by using linear algebra, Chebyshev polynomials and matrix analysis techniques.

Key Words and Phrases : *Complexity of graphs, Corona, Chebyshev polynomials, Lucas numbers, Fibonacci numbers.*