

ORDERING TREES AND CONNECTED GRAPHS BY THEIR WIENER INDEX

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Abstract

The Wiener index is the sum of distances between all pairs of vertices of a connected graph. In this paper we determine the third and the fourth maximal value of the Wiener index among trees and connected graphs respectively, with a given number $n \geq 6$ of vertices.

Keywords: Wiener index, distance, tree, connected graph.

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