

BLOCK GRAPHS WITH LARGE PAIRED DOMINATION MULTISUBDIVISION NUMBER

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Abstract

The paired domination multisubdivision number of a nonempty graph G , denoted by $\text{msd}_{\text{pr}}(G)$, is the smallest positive integer k such that there exists an edge which must be subdivided k times to increase the paired domination number of G . It is known that $\text{msd}_{\text{pr}}(G) \leq 4$ for all graphs G . We characterize block graphs with $\text{msd}_{\text{pr}}(G) = 4$.

Keywords: paired domination, domination subdivision number, domination multisubdivision number, block graph.

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