

COTOTAL DOMINATION IN LINE GRAPHS

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ABSTRACT

A dominating set D of a line graph $L(G)$ is a cototal dominating set if the induced subgraph $\langle V(L(G)) - D \rangle$ has no isolated vertices. The cototal domination number $\gamma_{ct}(L(G))$ is the minimum cardinality of a cototal dominating set of $L(G)$. In this paper, we study the graph theoretic properties of $\gamma_{ct}(L(G))$ and many bounds were obtained in terms of elements of G . Also its relationship with other domination parameters were found.

KEYWORDS: Graph, Line Graph, Cototal Dominating Set, Cototal Domination Number