DOMINATION PARAMETERS OF A GRAPH
AND ITS COMPLEMENT

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Abstract

A dominating set in a graph $G$ is a set $S$ of vertices such that every vertex in $V(G) \setminus S$ is adjacent to at least one vertex in $S$, and the domination number of $G$ is the minimum cardinality of a dominating set of $G$. Placing constraints on a dominating set yields different domination parameters, including total, connected, restrained, and clique domination numbers. In this paper, we study relationships among domination parameters of a graph and its complement.

Keywords: domination, complement, total domination, connected domination, clique domination, restrained domination.

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References


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