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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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