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RESTRAINED DOMINATION IN SELF-COMPLEMENTARY GRAPHS

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Abstract

A self-complementary graph is a graph isomorphic to its complement. A set S of vertices in a graph G is a restrained dominating set if every vertex in $V(G) \setminus S$ is adjacent to a vertex in S and to a vertex in $V(G) \setminus S$. The restrained domination number of a graph G is the minimum cardinality of a restrained dominating set of G. In this paper, we study restrained domination in self-complementary graphs. In particular, we characterize the self-complementary graphs having equal domination and restrained domination numbers.

Keywords: domination, complement, restrained domination, self-complementary graph.

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