

On Stratification and Domination in Graphs

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Abstract

A graph G is 2-stratified if its vertex set is partitioned into two classes, the red vertices and the blue vertices. Let F be a 2-stratified graph rooted at some blue vertex v . The F -domination number of a graph G is the minimum number of red vertices of G in a red-blue coloring of the vertices of G such that every blue vertex v of G belongs to a copy of F rooted at v . Some results concerning F -domination are presented.

Key Words: stratified graphs, F -domination.