

On \mathcal{F} -Domination in Graphs

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Let $G = (V, E)$ be a graph and let \mathcal{F} be a family of subsets of V such that $\bigcup_{F \in \mathcal{F}} F = V$.

A dominating set D of G is called an \mathcal{F} -dominating set if $D \cap F \neq \emptyset$ for all $F \in \mathcal{F}$. The minimum cardinality of an \mathcal{F} -dominating of G is called the \mathcal{F} -domination number of G and is denoted by $\gamma_{\mathcal{F}}(G)$. In this talk, we introduce this parameter, discuss its applications and present several basic results.

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