

The p -Domination Number of Complete Multipartite Graphs

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Let $G=(V,E)$ be a graph and p a positive integer. A subset $S\subseteq V$ is called a p -dominating set of G if every vertex not in S has at least p neighbors in S . The p -domination number is the minimum cardinality of a p -dominating set in G . In this paper, we establish an exact formula of the p -domination number of all complete multipartite graphs for arbitrary positive integer p .

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