On the domination number of some graphs.

ABSTRACT

Let G = (V,E) be a simple graph. A set S ⊆ V is a dominating set of graph G, if every vertex in V − S is adjacent to at least one vertex in S. The domination number $\gamma(G)$ is the minimum cardinality of a dominating set in G. It is well known that if e ∈ E(G), then $\gamma(G-e)-1 \leq \gamma(G) \leq \gamma(G-e)$. In this paper, as an application of this inequality, we obtain the domination number of some certain graphs.

Keyword: Domination number; Dominating set; Graph.