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Introduction to Transversal Pendant Domination in Graphs

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Abstract : Let G=(V, E) be a graph. A dominating set S in G is a pendant dominating set if < S > contains a pendant vertex. A pendant dominating set of G which intersects every minimum pendant dominating set in G is called a transversal pendant dominating set. The minimum cardinality of a transversal pendant dominating set is called the transversal pendant domination number of G, denoted by γ_tp(G). In this paper, we begin to study this parameter. We calculate γ_tp(G) for some families of graphs. Furthermore, some bounds and relations with other domination parameters are obtained for γ_tp(G).

Keywords : dominating set, pendant dominating set, pendant domination number, transversal pendant dominating set, transversal pendant domination number
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