## NEW RESULTS ON 3-DOMINATION CRITICAL GRAPHS

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Given a graph G, a subset D of the vertex set V of G is a dominating set if every vertex in  $V \setminus D$  has at lest one neighbor in D. The minimum cardinality among all dominating sets of G is called the domination number of G and is denoted by  $\gamma(G)$ . The graph G is said to be k-domination critical if  $\gamma(G) = k$  and the addition of any non existing edge makes its domination number decrease by one. The k-domination critical graphs were introduced by Sumner and Blitch [1] in 1983 and have awaken great interest among graph theorists. Specially the 3-domination critical graphs have been intensively studied by many authors. In this work, we revisit this topic presenting new results on 3-domination critical graphs. In particular, we give the characterization of some 3-domination critical graph families, among them those with minimum degree one.

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## References

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