

An Application Of Max-Radial Number Of Graphs In Game Theory

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Abstract

For a graph $G(V,E)$, the S -radial set, $BR(S)$, is defined for any set $S \subseteq V$, as the set of vertices $u \in V \setminus S$ which are at a distance of radius of G from some vertex $v \in S$. The Max-Radial number of G is the parameter which is defined as $\{|BR(S)| - |S| \text{ max}\}$. The study on this parameter faces the challenge of placing the maximum number of maximal length strings with certain conditions in any graph model. In this paper, we study the varied properties of this parameter. We characterize the extremal graphs for the Max-Radial concept in graphs. Also we prove the existence of graphs with given order and Max-Radial number.

Keywords

Metrics ; Differential ; Max-Radial number ; R-Differential ; Radius ;

Diameter. AMS Subject Classification code: 05C(Primary)




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