

عنوان مقاله:

Some results on the open locating-total domination number in graphs

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خلاصه مقاله:

In this paper, we generalize the concept of an open locating-dominating set in graphs. We introduce a concept as an open locating-total dominating set in graphs that is equivalent to the open neighborhood locating-dominating set. A vertex set $S \subseteq V(G)$ is an open locating-total dominating if the set S is a total dominating set of G and for any pair of distinct vertices x and y in $V(G)$, $N(x) \cap S \neq N(y) \cap S$. The open locating-total domination number, denoted $\gamma_t^{OL}(G)$, of G is the minimum cardinality of an open locating-total dominating set. In this paper, we determine the open locating-total dominating set of some families of graphs. Also, the open locating-total domination number is calculated for two families of trees. The present paper is an extended version of our paper, presented at the 5th Annual Iranian Mathematics Conference, Shahid Bahonar University of Kerman, Iran, 2021.

کلمات کلیدی:

Open Locating dominating, Total dominating set, Cartesian product of graphs

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