

RADIO NUMBER OF SOME WHEEL RELATED GRAPHS

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For a graph G and any two vertices u and v in G , let $d(u,v)$ denote the distance between them and let $diam(G)$ be the diameter of G . A multilevel distance labeling (or radio labeling) for G is a function f that assigns to each vertex of G a positive integer such that for any two distinct vertices u and v , $d(u,v) + |f(u) - f(v)| \geq diam(G) + 1$. The largest integer in the range of f is called the span of f and is denoted $\sigma(f)$. The radio number of G , denoted $rn(G)$, is the minimum span of any radio labeling for G . In this paper the radio numbers of some wheel related graphs are determined.

Keywords: multi-level distance labeling, radio number, diameter, multiple wheel, sunflower graph.

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