

**EVEN RADIO MEAN GRACEFUL LABELING ON DEGREE
SPLITTING OF SNAKE RELATED GRAPHS**

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(Received: Sep. 03, 2021 Accepted: Jun. 10, 2022 Published: Aug. 30, 2022)

Abstract: A radio mean labeling of a connected graph G is an injection ϕ from the vertex set $V(G)$ to \mathbb{N} such that the condition $d(u, v) + \left\lfloor \frac{\phi(u) + \phi(v)}{2} \right\rfloor \geq 1 + \text{diam}(G)$ holds for any two distinct vertices u and v of G . A graph which admits radio mean labeling is called radio mean graph. The radio mean number of ϕ , $\text{rmn}(\phi)$, is the maximum number assigned to any vertex of G . The radio mean number of G , $\text{rmn}(G)$, is the minimum value of $\text{rmn}(\phi)$ taken over all radio mean labeling ϕ of G . In this paper we introduce a new concept even radio mean graceful labeling and we investigate the even radio mean graceful labeling on degree splitting of snake related graphs.

Keywords and Phrases: Radio mean graceful labeling, even radio mean graceful labeling, degree splitting graph, triangular snake graph, quadrilateral snake graph.

2020 Mathematics Subject Classification: 05C78.