

# Review of: "The Vertex-Edge Locating Roman Domination of Some Graphs"

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**Potential competing interests:** No potential competing interests to declare.

1. What motivated the exploration of vertex-edge locating Roman dominating functions in graphs, and what practical or theoretical applications do they have in graph theory?
2. Can you provide intuitive examples or scenarios illustrating how a ve-LRD function effectively dominates the vertices and edges of a graph according to the defined conditions?
3. How does the concept of vertex-edge locating Roman domination number contribute to our understanding of graph domination parameters, and what insights does it provide into the structural properties of graphs?
4. What are the key insights gained from proving the NP-completeness of the vertex-edge locating Roman domination problem for bipartite graphs? How does this result impact our understanding of computational complexity in graph theory?
5. Can you explain the methodologies used to establish upper and lower bounds of ve-LRD functions for trees, and how these results contribute to our understanding of ve-LRD functions in tree graphs?
6. In the context of providing upper bounds for connected graphs, what are the main challenges and methodologies involved in determining the maximum weight of a ve-LRD function for different types of connected graphs?
7. It is mentioned that upper bounds of ve-LRD functions are provided for some connected graphs. Can you provide more details on the types of connected graphs considered and the methodologies used to establish these upper bounds?