SOMBOR INDEX OF SOME GRAPH VALUED FUNCTIONS OF SUBDIVISION GRAPHS

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Abstract: The Sombor index $SO(G)$ has recently introduced in the chemical graph theory. It is a vertex-degree-based topological index defined as $SO(G) = \sum_{uv \in E(G)} \sqrt{d_G(u)^2 + d_G(v)^2}$, where $d_G(u)$ is the degree of a vertex u in a graph G. In this paper we obtain Sombor index of line graph, total graph, semitotal line graph and semitotal point graph of subdivision graph.

Keywords and Phrases: Sombor index, subdivision graph, total graph, semitotal line graph, semitotal point graph.

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