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# SUPERMAGIC GRAPHS HAVING A SATURATED VERTEX[1]

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**Abstract**

A graph is called supermagic if it admits a labeling of the edges by pairwise different consecutive integers such that the sum of the labels of the edges incident with a vertex is independent of the particular vertex. In this paper we establish some conditions for graphs with a saturated vertex to be supermagic. Inter alia we show that complete multipartite graphs $K_{1,n,n}$ and $K_{1,2,\ldots,2}$ are supermagic.

**Keywords:** supermagic graph, saturated vertex, vertex-magic total labeling.

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