

DISTANCE MAGIC GRAPHS - A SURVEY

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Abstract. Let $G = (V, E)$ be a graph of order n . A bijection $f : V \rightarrow \{1, 2, \dots, n\}$ is called a *distance magic labeling* of G if there exists a positive integer k such that $\sum_{u \in N(v)} f(u) = k$ for all $v \in V$, where $N(v)$ is the open neighborhood of v . The constant k is called the magic constant of the labeling f . Any graph which admits a distance magic labeling is called a *distance magic graph*. In this paper we present a survey of existing results on distance magic graphs along with our recent results, open problems and conjectures.

Key words: Distance magic labeling, magic constant, fair incomplete tournament.