

M₂-EDGE COLORINGS OF CACTI AND GRAPH JOINS

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Abstract

An edge coloring φ of a graph G is called an M_2 -edge coloring if $|\varphi(v)| \leq 2$ for every vertex v of G , where $\varphi(v)$ is the set of colors of edges incident with v . Let $\mathcal{K}_2(G)$ denote the maximum number of colors used in an M_2 -edge coloring of G . In this paper we determine $\mathcal{K}_2(G)$ for trees, cacti, complete multipartite graphs and graph joins.

Keywords: cactus, edge coloring, graph join.

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