

# FRACTIONAL $\mathcal{Q}$ -EDGE COLORINGS OF GRAPHS

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An additive hereditary property of graphs is a class of simple graphs which is closed under unions, subgraphs, and isomorphism. Let  $\mathcal{Q}$  be an additive hereditary property of graphs. A  $\mathcal{Q}$ -edge coloring of a simple graph  $G$  is a coloring of the edges of  $G$  such that for each color  $i$  the edges colored by  $i$  induce a subgraph of property  $\mathcal{Q}$ . In this paper we present some results on fractional  $\mathcal{Q}$ -edge colorings. We determine the fractional  $\mathcal{Q}$ -edge chromatic index for matroidal properties of graphs.

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