

Graph colorings induced by graph labelings

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Let f be an edge labeling of a graph G . The weight of a vertex is defined as the sum of labels of all edges incident with that vertex. Consider such a labeling f where the weights of any two adjacent vertices are distinct. In this case, the labeling f induces a proper vertex coloring of G , where the color of a vertex is its vertex weight. This naturally leads to the concept of the corresponding chromatic number.

In this talk, we present several concepts of graph colorings induced by graph labelings.

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