

Face antimagic labelings of antiprisms*

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Abstract

The paper deals with the problem of labeling the vertices, edges and faces of a plane graph in such a way that the label of a face and the labels of vertices and edges surrounding that face add up to a weight of that face. A labeling of a plane graph is called *d-antimagic* if for every positive integer s , the s -sided face weights form an arithmetic progression with a difference d . Such a labeling is called *super* if the smallest possible labels appear on the vertices.

In this paper we will consider the antiprism as three cycle parts. The super d -antimagic labelings, for $d = 0, 1, \dots, 6$, we obtain as combination of the labelings of these cycle parts.

Keywords: plane graph, d -antimagic labeling, super d -antimagic labeling.

*The work was supported by Slovak VEGA Grant 1/4005/07 and Higher Education Commission Pakistan Grant HEC(FD)/2007/555.