

Kim Berna

Department of Mathematics , De La Salle University , 2401 Taft Avenue, 1004 Manila *Corresponding Author: yvette.lim@dlsu.edu.ph

Abstract: An edge-coloring of a graph G is equitable if, for each vertex ν in G, the number of edges colored with any one color incident with ν differs from the number of edges colored with any other color incident with ν by at most one. This paper will focus on the equitable edge-coloring of the peelable graphs where G is the minimum of all the degrees of the vertices of G. A graph is said to be peelable if all the vertices can be iteratively peeled o ff. Given Gthe subgraph of G induced by all the vertices of G with degree divisible by G is called the core of G. For purpose of simplicity, we will denote this subgraph by H_G If $d_{G(v)}$ represents the degree of vertex v in graph G, the vertices v_i ; i = 1, ... n_r , of a Gpeelable graph can be iteratively peeled of f in an order $v_1, v_2, ... v_n$ using the following peeling operation: For each 1 "i" n, peel off vertex v_i such that v_i has at most one neighbor v in H_G satisfying $d_{Gi-1}(v) = 2$, $\partial \!\!\!\! \tilde{Z}' \, \overline{J}' \, h \!\!\!\! \hat{A} \!\!\!\! \hat{G}' \, \hat{U}_{I} \, h \!\!\!\! \hat{A} \!\!\!\! \hat{G}' \, \hat{U}_{I} \, \, \hat{$ Equitable Edge-colorings of Simple Graphs µwhich appeared in the Journal of Graph Theory in March 2011. The objective of this paper is to provide the necessary algorithm to obtain an equitable edge-coloring for the given

k = G

result if