

On The Edge-face Total Chromatic Number of Pseudo-Halin Graphs with $\Delta(G) \geq 6$ ¹

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Abstract: For a 2-connected plane graph G , f_0 is a face without chord on its boundary (a cycle), and all vertices of $V(f_0)$ are at least 3. If remove all edges on the boundary of f_0 , G become a tree T which the degree of vertices except vertices of $V(f_0)$ is at least 3, then G is called a **Pseudo-Halin graph**, G is said to be **Halin graph** if all vertices of $V(f_0)$ is degree 3, and the minimum number $\chi_e(G)$ of colors used to color all elements in $E \cup F$ such that any adjacent or incident elements of $E \cup F$ is colored with distinct color is called **the edge-face total chromatic number of G** ^[2]. In this paper, we have proved that for any Pseudo-Halin graph G with $\Delta(G) \geq 6$, have $\chi_e(G) = \Delta(G)$.

Keywords: Pseudo-Halin graph, edge-face total chromatic number.
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