

1058-05-97

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AZ. *Planar graphs are 1-relaxed, 4-choosable.*

Let $G = (V, E)$ be a graph. A k -list assignment for G is a function L that assigns each vertex v a set $L(v)$ of k colors. An L -coloring is a vertex coloring f (not necessarily proper) such that $f(v) \in L(v)$ for every vertex $v \in V$. A vertex coloring f of G is d -relaxed if every color class $X = f^{-1}(\alpha)$ induces a subgraph $G[X]$ with maximum degree at most d . The graph G is d -relaxed, k -choosable if for every k -list assignment L there exists a d -relaxed L -coloring of G . When $d = 0$ then this is the usual notion of k -choosability.

Thomassen proved that every planar graph is 5-choosable and Voigt constructed a planar graph that is not 4-choosable. We prove that every planar graph is 1-relaxed, 4-choosable. (Received February 07, 2010)