CORR 2001-30

A Note on Partial Vertex List Colouring

P.E. Haxell, Zsuzsanna Szaniszlo*

Abstract Let G be a graph that is s-choosable. Suppose a list S(v) of size t < s of positive integers is assigned to each vertex v. We improve the lower bound on the number of vertices that can be properly coloured from the given lists. We prove that at least t/s of the vertices can be properly coloured in case s is a multiple of t. this settles part of a conjecture of Albertson, Grossman and Haas.