

ON DIFFERENCES BETWEEN DP-COLORING AND LIST COLORING

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DP-Coloring (also known as correspondence coloring) is a generalization of list coloring introduced recently by Dvořák and Postle [1]. Many known upper bounds for the list-chromatic number extend to the DP-chromatic number, but not all of them do. In this note we describe some properties of DP-coloring that set it aside from list coloring. In particular, we give an example of a planar bipartite graph with DP-chromatic number 4 and prove that the edge-DP-chromatic number of a d -regular graph with $d \geq 2$ is always at least $d + 1$.

Key words and phrases: list coloring of a graph, edge coloring, DP-coloring of a graph.

References

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Received

December 18, 2017

Revised

May 10, 2018

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Accepted

May 23, 2018

Translated into English:

Siberian Advances in Mathematics, V. 29, N 3, 183–189 (2019).

DOI: 10.3103/S1055134419030039