

INTERVAL INCIDENCE COLORING OF SUBCUBIC GRAPHS¹

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Abstract

In this paper we study the problem of interval incidence coloring of subcubic graphs. In [14] the authors proved that the interval incidence 4-coloring problem is polynomially solvable and the interval incidence 5-coloring problem is \mathcal{NP} -complete, and they asked if $\chi_{ii}(G) \leq 2\Delta(G)$ holds for an arbitrary graph G . In this paper, we prove that an interval incidence 6-coloring always exists for any subcubic graph G with $\Delta(G) = 3$.

Keywords: interval incidence coloring, incidence coloring, subcubic graph.

2010 Mathematics Subject Classification: 05C15, 05C85, 05C69.

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doi:10.1007/BF01305230

¹This project has been partially supported by Narodowe Centrum Nauki under contract DEC-2011/02/A/ST6/00201.

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Received 9 February 2016

Revised 12 January 2017

Accepted 12 January 2017