

CUBIC GRAPHS WITH TOTAL DOMATIC NUMBER AT LEAST TWO

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Abstract

Let G be a graph with no isolated vertex. A total dominating set of G is a set S of vertices of G such that every vertex is adjacent to at least one vertex in S . The total domatic number of a graph is the maximum number of total dominating sets which partition the vertex set of G . In this paper we provide a criterion under which a cubic graph has total domatic number at least two.

Keywords: total domination, total domatic number, coupon coloring.

2010 Mathematics Subject Classification: 05C15, 05C69.

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Received 26 February 2016
Revised 28 September 2016
Accepted 28 September 2016