

EVERY 8-TRACEABLE ORIENTED GRAPH IS TRACEABLE

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Abstract

A digraph of order n is k -traceable if $n \geq k$ and each of its induced subdigraphs of order k is traceable. It is known that if $2 \leq k \leq 6$, every k -traceable oriented graph is traceable but for $k = 7$ and for each $k \geq 9$, there exist k -traceable oriented graphs that are nontraceable. We show that every 8-traceable oriented graph is traceable.

Keywords: oriented graph, traceable, hypotraceable, k -traceable, generalized tournament.

2010 Mathematics Subject Classification: 05C20, 05C38.

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¹Supported by the National Research Foundation of S.A., Grant 81075.

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Received 6 January 2016

Revised 10 August 2016

Accepted 10 August 2016