

ACYCLIC EDGE COLOURING OF GRAPHS

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An *acyclic edge k -colouring* of a graph G is a proper edge k -colouring of G such that there are no bichromatic cycles. In other words, for every two distinct colours i and j , the subgraph induced in G by all the edges which have colour i or j is acyclic. The *acyclic chromatic index* of G is the minimum k such that G has an acyclic edge k -colouring.

We present new upper bounds for the acyclic chromatic index for some classes of graphs.

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