

GRAPHS WITH ISOLATION NUMBER EQUAL TO ONE THIRD OF THE ORDER

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A set D of vertices of a graph G is *isolating* if the set of vertices not in D and with no neighbor in D is independent. The *isolation number* of G , denoted by $\iota(G)$, is the minimum cardinality of an isolating set of G . It is known [3] that $\iota(G) \leq n/3$ if G is a connected graph of order n , distinct from C_5 . We characterize unicyclic and block graphs of order n with isolating number equal to $n/3$ and provide a family of general graphs attaining this upper bound on the isolation number.

References

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