

THE CARO - WEI - BOUND ON INDEPENDENCE

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Given an undirected and simple graph G , Y. Caro and V.K. Wei proved that $\alpha(G) \geq \sum_{v \in V(G)} \frac{1}{d_G(v)+1}$, where $\alpha(G)$, $V(G)$, and $d_G(v)$ are the independence number of G , the vertex set of G , and the degree of a vertex v in G , respectively.

We discuss several improvements of this lower bound on independence. Algorithmic realizations are also considered.

Keywords: independence, degrees, lower bound.

AMS Subject Classification: 05C69, 05C65.

References

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