

Graph Theory: Lecture No. 12

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Every graph G contains a cycle of length at least $\delta(G) + 1$, provided $\delta(G) \geq 2$.

Every graph G with at least one edge has a subgraph H with $\delta(H) > \epsilon(H) \geq \epsilon(G)$.

There is a function $h : N \rightarrow N$ such that every graph of average degree at least $h(r)$ contains K_r as a topological minor, for every $r \in N$.

Let $f(k) = h(3k) + 2k$. Then every $f(k)$ -connected graph is k -linked for all $k \in N$.

Let G be a graph and $k \in \mathbb{N}$. If G is $2k$ -connected and $\epsilon(G) \geq 8k$, then G is k -linked.