

问题与反馈

2014/11/21

5.4

- Prove that if v is a cut-vertex of a graph G , then v is not a cut-vertex of the complement G' of G .

5.10

- Prove that a connected graph G of size at least 2 is nonseparable if and only if any two adjacent edges of G lie on a common cycle of G .

5.12

- If a connected graph G contains 3 blocks and k cut-vertices, what are the possible values for k ?

5.22

- Prove that if G is a k -connected graph and e is an edge of G then $G-e$ is $(k-1)$ connected.
- Prove that if G is a k -edge-connected graph and e is an edge of G , then $G-e$ is $(k-1)$ -edge-connected.

5.26

- Prove that if G is a graph of order n such that $\delta(G) \geq (n-1)/2$, then $\lambda(G) = \delta(G)$.

5.34

- Prove Corollary 5.18: Let G be a k -connected graph and Let S be any set of k vertices. If a graph H is obtained from G by adding a new vertex w and joining w to the vertices of S , then H is also k -connected.