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Graphentheorie
5. Übungsblatt WS 05/06
Abgabetermin: 05.12.05

Exercise 27

Prove that if v is any vertex of a connected graph G of order at least 4, then $G^3 - v$ is hamiltonian.

Exercise 28

Prove that if G is a self-complementary graph of order at least 5, then G^2 is hamiltonian connected.

Exercise 29

Prove that $L(G)$ is eulerian if G is eulerian.

Exercise 30

Prove or disprove: If G is hamiltonian, then G^2 is Hamiltonian-connected.

Exercise 31

Prove or disprove: If G is connected and $L(G)$ is eulerian, then G is eulerian.