Dr. Christian Scheideler
Johns Hopkins University

Baltimore, April 24 2001

Modern Complexity Theory

Spring 2001

Assignment 11

Problem 32 (3 points)**:**
Prove Theorem 12.1.

Problem 33 (3 points)**:**
Prove Theorem 12.2.

Problem 34 (3 points)**:**
Prove Theorem 13.1.

Problem 35 (3 points)**:**
Prove one direction of Theorem 13.3: if $q_i \cdot q_j = q_k \cdot q_\ell$ for all i, j, k, ℓ with $p_{(i,j),(k,\ell)} > 0$ and the QDS is symmetric, locally reversible, and aperiodic, then the distribution $\boldsymbol{q}$ is stationary.