Problem Set #8
EECS 381/409, Prof. Michael S. Branicky

Due: 28 April 2008

Reading Assignment: Lecture notes; Sections 7.1 and 7.2 Cassandras and Lafortune; Chapter 7 of Luenberger; the paper “Modeling and Throughput Prediction for Flexible Parts Feeders” on the course website (BCQ2).

Problems 8.1–6
Problems 7.2, 7.6, 7.7, 7.8(a)–(c), 7.9, and 7.11 of Cassandras and Lafortune.

The following are worth extra credit; it is OK if they are turned in by noon on 30 April 2008.

Problems 8.7–9
Problems 4, 13, and 14 on pp. 248–251 of the Luenberger handout.

Problem 8.10
Verify, by hand or by using Matlab or a calculator, all the “success models” in the paper BCQ2. Specifically, verify both the mean number of steps and the throughputs for Figure 2 and the success models corresponding to Figures 3 and 4. In the case of Figure 3, draw its success model (no need to draw for the other cases). Turn in your calculations or code plus answers and brief discussion.