

OA 3302 Summer 2004 Assignment 1
Due: 15 July 2004

Consider a multiple-server queue with two (2) servers. The first five customers arriving to the system have the following inter arrival times: $\{1.8, 1.7, 1.8, 1.9, 10.4\}$. Service times for the first four customers served are $\{8.7, 0.7, 7.0, 3.6\}$. Perform a hand simulation of this system.

- For each event as it occurs, show the current time, the current event, the current state values, and the current state of the event list. Your simulation should run until the fourth customer completes service.
- Compute the average number of customers in the system ($\#$ in queue + number in service) at the time the fourth customer completes service.
- Compute the average time in the system (“time in the system” is the time between arrival to end of service) for the first four customers.
- Compute the average arrival rate to the system at the time the fourth customer completes service. Be sure to use all the information from the simulation run!