

Solution to Problem 5.4

Applying either the convolution algorithm or MVA, we can get the following solution.

For Q_1	Mean Queue Length = 0.318335 Mean Waiting Time = 0.228111 Mean Throughput = 0.325439 Visit Ratio = 1
For Q_2	Mean Queue Length = 3.802020 Mean Waiting Time = 2.170507 Mean Throughput = 1.301837 Visit Ratio = 4
For Q_3	Mean Queue Length = 0.879640 Mean Waiting Time = 0.601382 Mean Throughput = 0.650919 Visit Ratio = 2