

## Multiple server queues

Using the data provided for the M/M/c, now consider a system modelled with an M/M/c/K queue, with  $K=10$ , a variable number of servers from  $c=1$  to  $c=8$ , and the parameters previously specified.

For each arrival rate / number of servers couple determine:

- The average response time
- The average time spent in queue
- The average queue length of the system
- The probability of having the system empty
- The probability of having the system full

Plot the results to emphasize the analysis.

**This exercise is mandatory and must be presented at the exam!**