

(Q, r) policies

1. Describe how a (Q, r) policy operates.
2. When will a (Q, r) policy operate as an (s, S) policy?
3. Write an expression for the average cost $c(Q, r)$ when demand is Poisson with parameter λ .
4. Describe how to find an optimal r for a given Q in terms of the values of y corresponding to the Q smallest values of the G function.
5. Let $c(Q) = c(Q, r(Q))$ be the optimal cost for a given value of Q . Explain how to obtain $c(Q + 1)$ in terms of $c(Q)$ and G_{Q+1} .
6. Use the algorithm presented in class to find the optimal (Q, r) policy when $K = 10$, $h = 1$, $b = 9$, $\lambda = 10$, and $L = 0.2$.
7. Compare the cost to the upper bound presented in class.