

Department of Mathematical Sciences  
**CARNEGIE MELLON UNIVERSITY**

**OPERATIONS RESEARCH II 21-393**

Homework 4: Due Wednesday October 29.

1. Find the optimal ordering strategy for the following inventory system.  
If you order an amount  $Q$ , it costs  $AQ^{1/2}$  and the inventory cost is  $I$  per unit per period. The demand is  $\lambda$  units per period and no stock-outs are allowed.
2. 16.6-5 of book.
3. 19.5-7 of book.