PART I:
Chapter 5

12.   Since $MRTS_{KL} \neq \dfrac{w}{r}$, the firm was not using the cost minimizing combination of
       labor and capital. To achieve the cost minimizing combination of inputs, the
       previous manager should have used fewer units of capital and more units of labor,
       since $\dfrac{MP_L}{w} = \dfrac{100}{8} > \dfrac{MP_K}{r} = \dfrac{100}{16}$.

18.   Facility "L" produces 6 million kilowatt hours of electricity at the lowest average
       total cost, so this is the optimal facility for South-Florida. Facility "M" produces 2
       million kilowatt hours of electricity at the lowest average total cost, so this is the
       optimal facility for the Panhandle. There are economies of scale up to about 3
       million kilowatts per hour, and diseconomies of scale thereafter. Therefore,
       facility "M" will be operating in the range of economies of scale while facility
       "L" will be operating in the range of diseconomies of scale.

Chapter 6

11.   The environment in which computer manufacturers operate is very uncertain. The
       rate of technical progress among chip, and other hardware, manufacturers
       increases the marginal cost of signing long-term contracts.

15.   The first important point to make with shareholders is that restructuring the
       incentive plan is designed to maximize shareholder value. This is achieved by
       giving employees incentives to stay with the company longer, thereby reducing
       costly employee turnover and increasing the company's profitability. Also, by
       restructuring the incentive plan, employees will want to find ways to work more
       productively and make the company more profitable. The benefits to the
       shareholders and the employees will be a higher stock price.

21.   Business-process outsourcing (BPO) is a contractual relationship with a third-
       party firm, whereas a firm that produces human resource services internally is
       vertically integrated. Contracting human resource services with a third party
       allows the firm to specialize in activities related to its core business, which as the
       problem points out may result in large cost savings. Contracts, however, are
       costly to write and often incomplete. These reasons provide justification for
       vertical integration. Contracting with an international-based firm may be more
       costly since the contract must be written in a manner to protect the firm in a
       foreign country. This extra cost should be compared to the extra benefit (cost
       savings) that accrues from lower off shore labor. Furthermore, there may be
       cultural difference in hiring practices that may make outsourcing from human
       resources to an international firm less attractive.

23.   The money the dealership pays to train workers in the form of time and expenses
       is a specialized investment in human capital. The investment only has value to
       the dealership if workers remain with the dealership and the dealership maintains
       its relationship ADP. Once this is sunk, it faces a potential "hold-up" problem
       from workers and ADP: If either party decides to sever the relationship, the
       dealership will have to sink additional funds into training new employees.

PART II:

Table 1:

Costs/Values	No. of Units held by Sellers	Buyers	Cumulative Sellers	Cumulative Buyers
1	0	3	0	32
2	0	5	0	29
3	4	4	4	24
4	3	3	7	20
5	2	6	9	17
6	3	3	12	11
7	5	2	17	8
8	3	3	20	6
9	3	3	23	3
10	4	0	27	0

a) see graph on next page

b) see graph on next page

c) The equilibrium price should be between 6 and 7 as that is where the cumulative
buyers and sellers would intersect.

d)

Table 2:

Transaction prices	
Period 1	Period 2
Mean	
4.857142857	5.2085714
Median	
5	5
Standard Dev.	
0.534522484	0.5341688

e) For consumer surplus:

Let us predict the price is 5. The consumer surplus should be ((10-5)*0)+((9-5)*3)+((8-5)*3)+((7-5)*2)+((6-5)*3) = 6+9+4+3=18.

The producer surplus is ((5-3)*4)+((5-4)*3)=8+3=11.

We cannot calculate the actual consumer and producer surplus.

f) The predictive power is quite strong as our prediction on equilibrium price and
quantity using Table 1 is quite similar to the actual numbers in Table 2.

Double Auction Market

prices

quantity
Data collected in class 101