Chapter 15

1. a. What are the three sources of the barriers to entry that allow a monopoly to remain the sole seller of a product?

b. What is the entry barrier that is the source of the monopoly power for the following products or producers? List some competitors that keep these products or producers from having absolute monopoly power.

1. The UK's Royal Mail (postal service)
2. Perrier Spring Water
3. Prozac (a brand name drug)
4. DeBeers Diamonds
5. Economics, by N. Gregory Mankiw and Mark P. Taylor (your textbook)

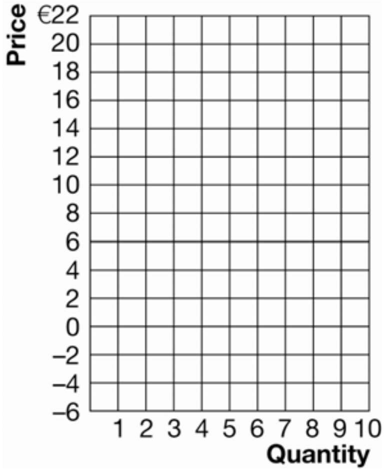
2. Suppose a firm has a patent on a special process to make a unique smoked salmon. The following table provides information about the demand facing this firm for this unique product.

Pounds of Salmon	**Price**	**$(P \times Q)$ Total Revenue**	**$(\Delta TR/\Delta Q)$ Marginal Revenue**
0	€20	______	
1	18	______	______
2	16	______	______
3	14	______	______
4	12	______	______
5	10	______	______
6	8	______	______
7	6	______	______

a. Complete the table above.

b. Plot the demand curve and the marginal revenue curve in Exhibit 1.

Exhibit 1



c. Suppose that there are no fixed costs and that the marginal cost of production of smoked salmon is constant at €6 per kilogram. (Thus, the average total cost is also constant at €6 per kilogram.) What is the quantity and price chosen by the monopolist? What is the profit earned by the monopolist? Show your solution on the graph you created in part (b) above.

e. What is the price and quantity that maximizes total surplus?

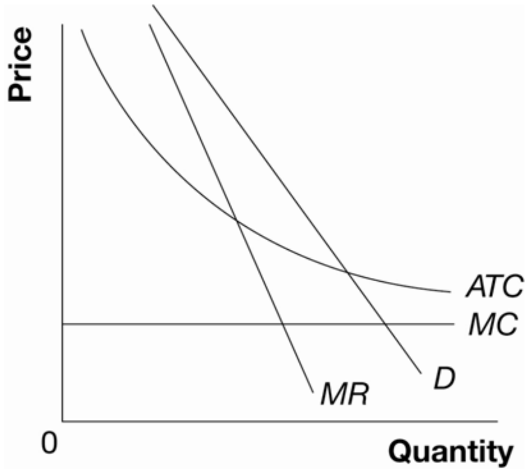
f. Compare the monopoly solution and the efficient solution. That is, is the monopolist's price too high or too low? Is the monopolist's quantity too high or too low? Why?

g. Is there a deadweight loss in this market if the monopolist charges the monopoly price? Explain.

h. If the monopolist is able to costlessly and perfectly price discriminate, is the outcome efficient? Explain. What is the value of consumer surplus, producer surplus, and total surplus? Explain.

3. a. What type of market is represented in Exhibit 2: perfect competition, monopoly, or natural monopoly? Explain.

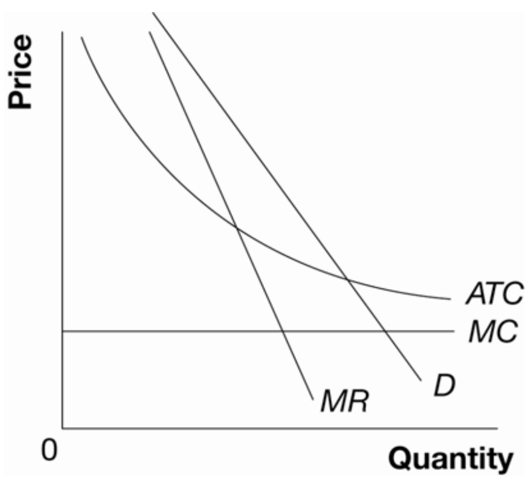
Exhibit 2



b. Show the profit or loss generated by this firm in Exhibit 2 assuming that the firm maximizes profit.

c. Suppose government regulators force this firm to set the price equal to its marginal cost in order to improve efficiency in this market. In Exhibit 3 show the profit or loss generated by this firm.

Exhibit 3



d. In the long run, will forcing this firm to charge a price equal to its marginal cost improve efficiency? Explain.