Economics 308: Intermediate Microeconomics

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Problem Set #7

1. The Coase Theorem says that efficiency in resource allocation will result from assigning property rights to resources. Give the intuition behind this theorem. Does it matter who receives the rights to the property? Explain.

2. Bryan can smoke his Newport Cigarettes with or without a filter. Smoking without a filter results in greater second-hand smoke damage to his mom. The relevant gains and losses for the two individuals are listed in the table below.

	With Filter	Without Filter
Gains to Bryan	$200/week	$245/week
Damage to his mom	$35/week	$85/week

   a. If Bryan is not liable for smoke damage and there are no negotiation costs, will the smoke with a filter? Explain carefully.
   b. How, if at all, would the outcome be different if Bryan were liable for all second hand smoke damage and the cost of filtered cigarettes were $10/week higher than indicated in the table? Explain carefully.

3. Recently, Ted Turner of Turner Broadcasting, argued before a congressional committee that they should make a law rating TV shows for violence content. He said that children are damaged and violence must be curbed. He indicated that his own network shows too much violence. Explain why someone who shows violence on his TV channels is arguing for government regulation of himself.

4. Televisions seem to fit the definition of a public good fairly well, yet most TV in the U.S. is provided by private companies. Can you explain why? How has HBO dealt wit the problem of excludability?

5. There is considerable legal controversy about product safety. Two extreme positions might be termed let the buyer beware and let the seller beware. Under the former scheme producers would have no responsibility for the safety of their products: buyers would absorb all loses. Under the latter scheme this liability assignment would be reversed: firms would be completely responsible under law for losses incurred from unsafe products. Using simple supply and demand analysis, discuss how the assignment of such liability might affect the allocation of resources. Would safer products be produced if firms were strictly liable under law? How do possible information asymmetries affect your results?

6. Suppose a monopoly produces a harmful externality. Use the concept of consumer

surplus to analyze whether an optimal tax on the polluter would necessarily be a welfare improvement.

7. A monopolist can produce at constant average and marginal costs of AC = MC = 5. The firm faces a market demand curve given by Q = 53 – P.
    a. Calculate the profit-maximizing price-quantity combination for the monopolist. Also calculate the monopolist's profits.
    b. What output level would be produced by this industry under perfect competition (where P = MC)?
    c. Calculate the consumer surplus obtain by consumers in case (b). Show that this exceeds the sum of the monopolist's profits and the consumer surplus received in case (a). What is the value of the "deadweight loss" from monopolization?

8. Suppose the market for Hula Hoops is monopolized by a single firm
    a. Draw the initial equilibrium for such a market
    b. Now suppose the demand for Hula Hoops shifts outward slightly. Show that, in general (contrary to the competitive case), it will not be possible to predict the effect of this shift in demand on the market price of Hula Hoops.