

Homework 7

Due Wednesday, April 15, 2009

1. The muffler on your car suddenly needs repair, and there are only two automobile repair shops in town. You drive to the first shop, and the mechanic tells you to leave the car and he will repair it. Payment will be due when you pick it up. A mechanic at the second shop looks at your car and guarantees that she will charge you only \$99.95 to repair the muffler, as advertised. Discuss the effects of their pricing schemes on moral hazard and quality.
2. A \$1 per pack increase in the federal tax on cigarettes has been proposed as a method of discouraging smoking by teenagers. Some statistical estimates suggest that a 10 percent increase in the price of cigarettes causes teenagers to reduce their demand for cigarettes by 12 percent. Older smokers are less likely to reduce smoking in the face of a higher tax. Proponents of the tax also claim that it would raise about \$20 billion a year in additional revenue for the federal government.
Use a diagram of the supply and demand for cigarettes to show the following:
 - (a) The effect of the tax on the market supply curve and the price of cigarettes.
 - (b) In the diagram, identify the revenue that the tax generates for the government.
 - (c) Show how the effect of the tax depends on the price elasticities of demand and supply. Are there elasticities for which the tax has no effect on the number of cigarettes sold? Are there elasticities for which the tax will raise very little revenue?
3. If the external costs of a pack of cigarettes is 33 cents, should the tax per pack of cigarettes be higher, the same, or lower than 33 cents if we believed in the rational addiction model? What if we believed in rational addiction with time inconsistency? with myopia? Explain your answers.
4. How can smoking bans adversely affect children?