

Practice Problem 1 – Microeconomic Principles

Not required to be handed in, but will be discussed in class

1. Assume that France can produce wine at 25 bottles per worker and cheese at 5 pounds per worker. Assume that Italy can produce 10 bottles of wine per worker and 20 pounds of cheese per worker.
 - a. In terms of cheese, what is the opportunity cost of producing wine in each country?
 - b. Who has the comparative advantage in producing cheese?
 - c. Which country should most likely specialize in cheese? in wine?
2. Suppose the market for coffee is currently in equilibrium at a price of \$3 per pound. An early frost in coffee-growing nations decreases the supply of coffee. Use supply and demand analysis to forecast the impact of the freeze on the market equilibrium price and quantity of coffee.
3. The federal government announces that it will pay \$3 a loaf for all the bread that can't be sold in a competitive market at that price. At the end of each week, the government purchases 1 million loaves of bread. Use supply and demand analysis to show on a graph that the market equilibrium price is less than 3 per loaf. Why doesn't the market price fall in this case?
4. Construct a number of different scenarios involving supply and demand. That is, think of a market and then show effects on P and Q if factors affecting S and D change.
5. What is the connection between elasticity and total revenue?
6. Explain why the short-run demand curve is usually less elastic than the long-run demand curve?
7. What are the differences between momentary, short-run, and long-run supply? Which is the most elastic? The least elastic?
8. Using your knowledge of microeconomics, explain what would be possible solutions to climate change (assume you believe in it even if you do not). Why is it a problem? Make your policy recommendations using sound economic analysis.

9. Draw the supply and demand curve for gasoline with the market in equilibrium at price P_e and Q_e . Show the areas of consumer surplus and producer surplus. Now assume a tax is imposed on the supply of gasoline. Label the new equilibrium price and quantity. Show:

Results of the Tax

- a. Reduction in consumer surplus:
 - b. Reduction in producer surplus:
 - c. Tax revenues to government:
 - d. Deadweight loss:
10. The drug problem is often associated with crime. Drug-addicts, for example, need to steal to finance their habit. Analysis indicates that the elasticity of demand for heroin is 0.1 (very inelastic) and the supply for heroin is relatively elastic. Using this information, assess the impact on heroin prices and the quantity exchanged for the following two anti-heroin policies. Which policy would result in more crime and which would result in less crime? Use graphs to illustrate your answers as appropriate.
- a. Drug interdiction (ban on drugs, for example) efforts to reduce the supply of drugs.
 - b. Drug education and testing programs to reduce the demand for heroin.