

## Practice Problems on Supply and Demand

1. Draw typically shaped supply and demand curves for hot dogs and indicate the equilibrium price and quantity. Use the graph to illustrate what will happen to the equilibrium price and quantity of hot dogs if there is an increase in income in the economy and explain.
2. Suppose a fleet of alien vessels carries away a large percent of the beef cattle on earth. Use supply and demand to illustrate the impact of this on the following. Label your diagrams clearly and explain each briefly.
  - a. The price and quantity of beef on earth.
  - b. The price and quantity of hamburger rolls.
  - c. The price and quantity of chicken (assuming that chicken is a substitute for beef).
  - d. for beef).
  - e. The price and quantity of vegetable beef soup.
3. Suppose that the profitability of growing corn to produce ethanol rises sharply. Use supply and demand to illustrate the impact of this on the market for wheat. Label your diagram clearly and explain.
4. Suppose that both consumers and producers expect prices of plywood to be much higher in three months. Use supply and demand to illustrate the impact of this on the current market for plywood. Label your diagram clearly and explain.
5. Consider the market for bread. Briefly describe what impact each of the following would have on demand, supply, equilibrium quantity, and equilibrium price of bread. Illustrate answers with graphs if helpful.
  - a. A new type for fertilizer increases productivity of the wheat crop.
  - b. The price of butter rises due to a disease affecting cows.
  - c. Concern over food additives reduces the demand for bread.
  - d. A work stoppage by bread producers increases labor costs.
  - e. To support bread prices, the government agrees to buy all surplus bread and pay 10% more than the current market price.
  - f. To help reduce inflation, the government places a ceiling on the price of bread equal to the lower price that existed two years ago.
6. Briefly analyze in terms of supply and demand the effects upon the given market of the following events. Are these changes a shift in the demand curve, a shift in the supply curve, a movement along the demand curve, or a movement along the supply curve? (More than one will apply. Be sure you understand why.) Explain briefly. Draw a graph.
  - a. 20,000 workers move from the rural area of Pennsylvania to Maryland in order to take advantage of higher manufacturing wages in Maryland. (Discuss the effects in both labor markets, Pennsylvania and Maryland. Think about why wages might initially be different in the two states. Hint: It is critically important that the migration is a response to a difference in wages.)
  - b. The deployment of troops from a particular military base in a given area reduces the local population by 10% overnight; within days 100 local barbers go out of business. (Discuss the local market for barbers.)
  - c. New regulations limit the amount of fish that can be caught off the coast of Maine, and 16 percent of professional fisherpersons wind up working in other industries.