10. *(Tax Rates)* Suppose taxes are related to income as follows:

Income	Taxes
$1,000	$200
$2,000	$350
$3,000	$450

a. What percentage of income is paid in taxes at each level?
b. Is the tax rate progressive, proportional, or regressive?
c. What is the marginal tax rate on the first $1,000 of income? The second $1,000? The third $1,000?

11. *(Government Revenue)* What are the sources of government revenue in the United States? Which types of taxes are most important at each level of government? Which two taxes provide the most revenue to the federal government?
12. *(Externalities)* Suppose there is an external cost, or negative externality, associated with production of a certain good. What's wrong with letting the market determine how much of this good will be produced?

3-4 Explain why countries trade with each other and why they sometimes act to restrict that trade

13. *(International Trade)* Why does international trade occur? What does it mean to run a deficit in the merchandise trade balance?
14. *(International Trade)* Distinguish between a tariff and a quota. Who benefits from and who is harmed by such restrictions on imports?

CHAPTER 4

4-1 Explain why a demand curve slopes downward

1. *(Shifting Demand)* Using demand and supply curves, show the effect of each of the following on the market for cigarettes:
   a. A cure for lung cancer is found.
   b. The price of cigars increases.
   c. Wages increase substantially in states that grow tobacco.
   d. A fertilizer that increases the yield per acre of tobacco is discovered.
   e. There is a sharp increase in the price of matches, lighters, and lighter fluid.
   f. More states pass laws restricting smoking in restaurants and public places.
2. *(Substitutes and Complements)* For each of the following pair of goods, determine whether the goods are substitutes, complements, or unrelated:
   a. Peanut butter and jelly
   b. Private and public transportation
   c. Coke and Pepsi
   d. Alarm clocks and automobiles
   e. Golf clubs and golf balls

4-2 Identify five things which could shift a demand curve to the right or left

3. *(Demand Shifters)* List five things that are held constant along a market demand curve, and identify the change in each that would shift that demand curve to the right—that is, that would increase demand.

4-3 Explain why a supply curve usually slopes upward

4. *(Supply)* Why is a firm willing and able to increase the quantity supplied as the product price increases?
5. *(Supply)* What is the law of supply? Give an example of how you have observed the law of supply at work. What is the relationship between the law of supply and the supply curve?

4-4 Identify five things which could shift a supply curve to the right or left

6. *(Supply Shifters)* List the five things that are held constant along a market supply curve, and identify the change in each that would shift that supply curve to the right—that is, that would increase supply.
7. *(Demand and Supply)* How do you think each of the following affected the world price of oil? (Use demand and supply analysis.)
   a. Tax credits were offered for expenditures on home insulation.
   b. The Alaskan oil pipeline was completed.
   c. The ceiling on the price of oil was removed.
   d. Oil was discovered in the North Sea.
   e. Sport utility vehicles and minivans became popular.
   f. The use of nuclear power declined.
8. *(Demand and Supply)* What happens to the equilibrium price and quantity of ice cream in response to each of the following? Explain your answers.
   a. The price of dairy cow fodder increases.
   b. The price of beef decreases.
   c. Concerns arise about the fat content of ice cream. Simultaneously, the price of sugar (used to produce ice cream) increases.

4-5 Explain why surpluses push prices down while shortages drive prices up

9. *(Market Surplus)* Why would firms accept a lower price if there is a market surplus?
10. *(Market Shortage)* Why would firms raise the price if there is a market shortage, and why would some consumers pay that higher price. At what point would firms stop raising the price?

4-6 Predict the impact of a change in demand or supply on the equilibrium price and quantity

11. *(Equilibrium)* "If a price is not an equilibrium price, there is a tendency for it to move to its equilibrium level. Regardless of whether the price is too high or too low to begin with, the adjustment process will increase the quantity of the good purchased." Explain, using a demand and supply diagram.
12. *(Equilibrium)* Assume the market for corn is depicted as in the table that appears below.
    a. Complete the table below.
    b. What market pressure occurs when quantity demanded exceeds quantity supplied? Explain.
    c. What market pressure occurs when quantity supplied exceeds quantity demanded? Explain.
    d. What is the equilibrium price?
    e. What could change the equilibrium price?
    f. At each price in the first column of the table below, how much is sold?