1. **The law of demand concludes that a rise in the price of a golf ball ____ the quantity demanded and ____.**

a. increases; shifts the demand curve rightward.
b. decreases; shifts the demand curve leftward.
c. decreases; creates a movement upward along the demand curve.
d. increases; creates a movement downward along the demand curve.
The law of demand points out that a higher price decreases the quantity demanded and creates a movement upward along the demand curve.

2. **If a rise in the price of gasoline decreases the demand for large cars,**

a. gasoline and large cars are substitutes in consumption.
b. gasoline and large cars are complements in consumption.
c. gasoline is an inferior good.
d. large cars are an inferior good.
The definition of complementary goods is that a rise in the price of one decreases the demand for the other.

3. **Which of the following influences does NOT shift the supply curve?**

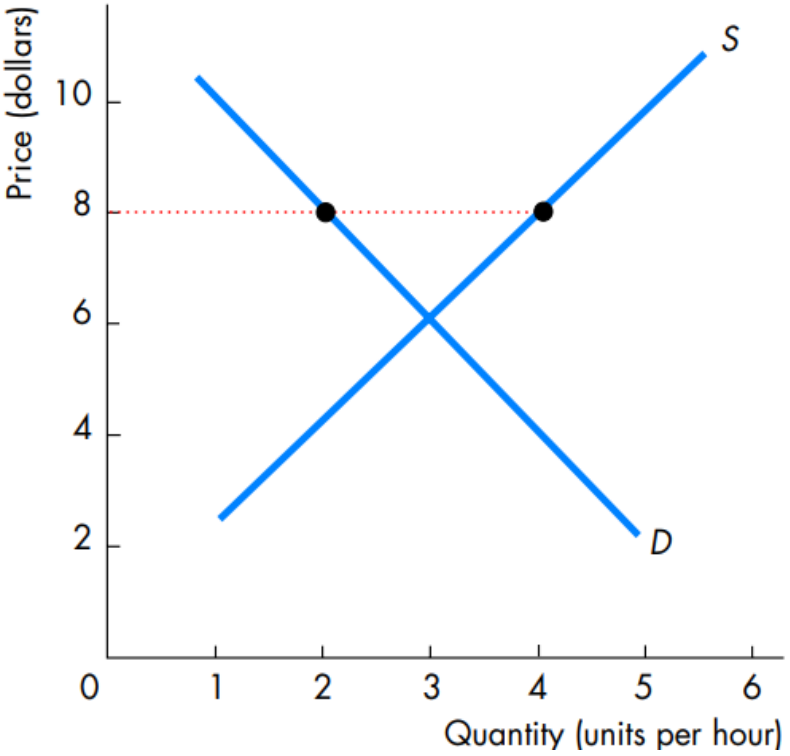
a. A rise in the wages paid workers
b. Development of new technology
c. People deciding that they want to buy more of the product
d. A decrease in the number of suppliers
A change in preferences shifts the demand curve, not the supply curve.

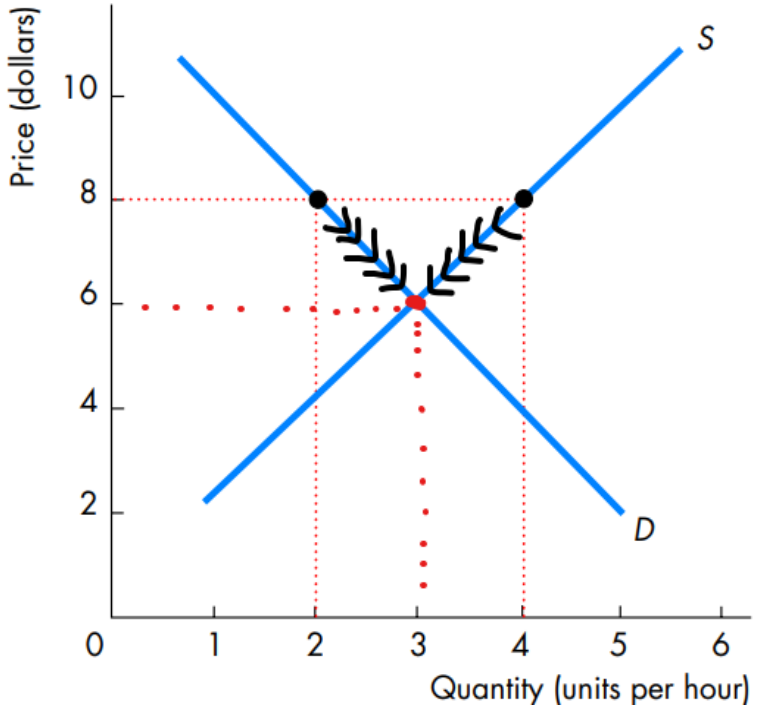
4. **An increase in the cost of producing video tape shifts the supply curve of video tape ____ and shifts the demand curve for video tape ____.**

a. rightward; leftward
b. leftward; leftward
c. leftward; not at all
d. not at all; leftward
A change in the cost to produce a product shifts the supply curve but does not shift the demand curve.

5. **If the market for Oreo is in equilibrium, then**

a. Oreos must be a normal good.
b. producers would like to sell more at the current price.
c. consumers would like to buy more at the current price.
d. the quantity supplied equals the quantity demanded.
At equilibrium, consumers and suppliers are simultaneously satisfied to an extent as the quantity consumers are willing to buy matches the quantity producers are willing to sell.





6. In the figure, at the price of $8 there is a

a. shortage and the price will rise.
b. shortage and the price will fall.
c. surplus and the price will rise.
d. surplus and the price will fall.

There is surplus because, as illustrated in figure, the quantity supplied at the price of $8 is 4. This quantity exceeds 2, the quantity demanded.

- To eliminate this *surplus*, sellers will lower the price, reducing quantity supplied and increasing quantity demanded.

7. **For consumers, pizza and hamburgers are substitutes. A rise in the price of pizza ____ the price of a hamburger and ____ in the quantity of hamburgers.**

a. raises; increases
b. raises; decreases
c. lowers; increases
d. lowers; decreases

The rise in the price of a pizza increases the demand for hamburgers, which results in a rise in the price of a hamburger and an increase in the quantity of hamburgers.

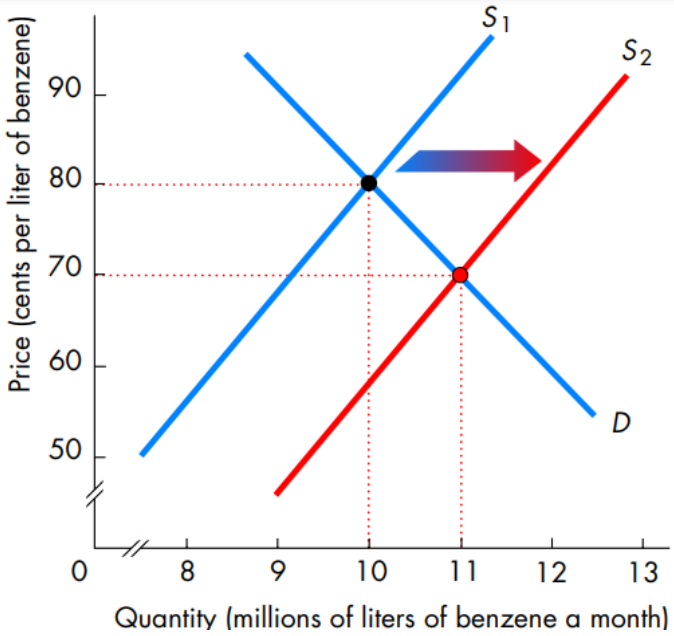
8. **The number of firms producing computer memory chips decreases. As a result, the price of a memory chip ____ and the quantity of memory chips ____.**

a. rises; increases
b. rises; decreases
c. falls; increases
d. falls; decreases

The decrease in the number of firms producing memory chips decreases the supply of memory chips, which raises the price and decreases the quantity of chips

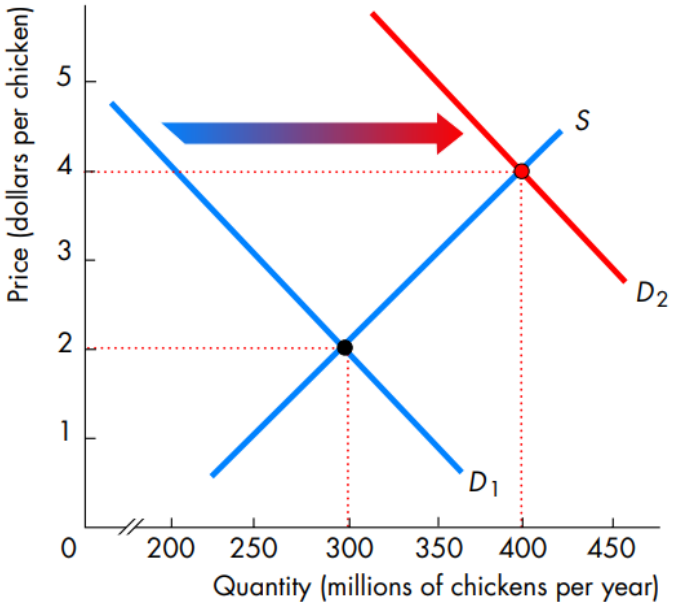
B. Short Questions

1. Chemical companies discover a new, more efficient technology for producing benzene. Use a supply and demand model to determine the impact that this new method has on the equilibrium price and quantity of benzene.



➔ New technology increases the supply, so the supply curve shifts rightward. Then, as figure shows, the price falls (from 80 cents a liter to 70 cents in the figure) and the equilibrium quantity increases from (10 million liters of benzene a month to 11 million).

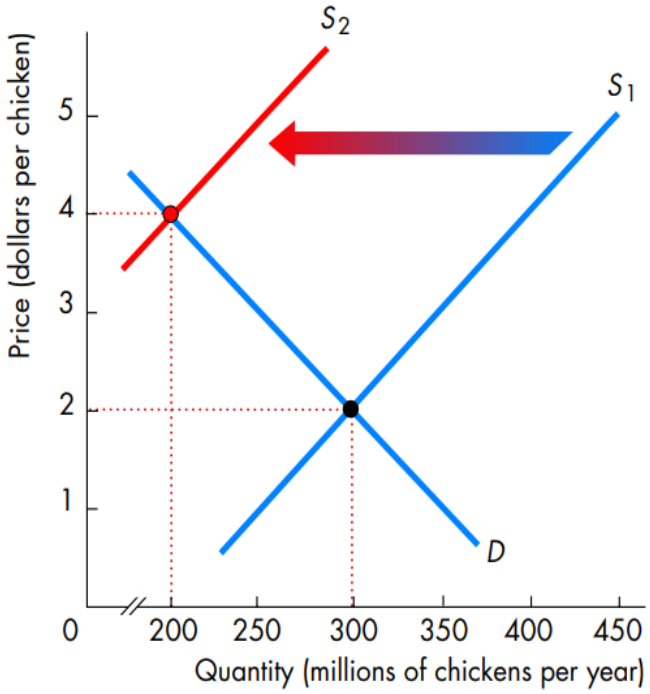
2. **a.** The market for chickens initially is in equilibrium. Suppose that eating buffalo wings (which, contrary to the name, are made from chicken wings) becomes so stylish that people eat them for breakfast, lunch, and dinner. Use a supply and demand diagram to determine how the equilibrium price and quantity of chicken change.



➔ With the change in people's preferences — so that they want more chicken wings and hence more chickens — the demand for chickens increases. The increase in the demand for chickens means that the demand curve for chickens shifts rightward. The figure shows this change. As it demonstrates, the equilibrium price rises (from $2 to $4 per chicken) and the equilibrium quantity of chickens increases (from 300 million to 400 million).

- Note that the change in people's preferences does not affect the supply of chicken, so the supply curve does not shift.

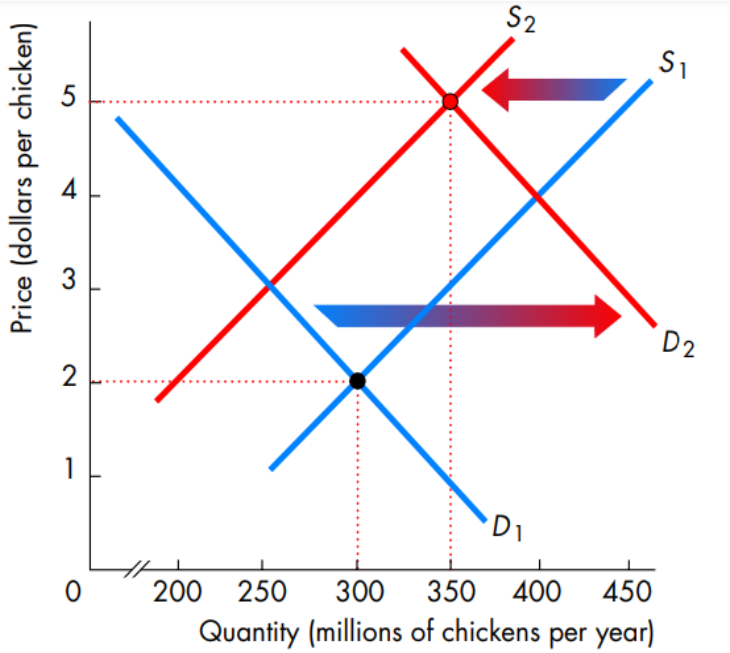
b. Return to the initial equilibrium, before eating buffalo wings became stylish. Now suppose that a heat wave occurred and caused tens of thousands of chickens to die. Keeping in mind that dead chickens cannot be marketed, use a supply and demand diagram to determine what happens to the equilibrium price and quantity of chicken.



➔ The heat wave decreases the number of chickens that can be supplied. This change shifts the supply curve for chickens leftward, as shown in the figure. As a result, the heat wave raises the price of a chicken (from $2 to $4) and decreases the quantity (from 300 million to 200 million).

c. Now assume that both the heat wave and fad (craze over the chicken wings) strike at the same time. Use a supply and demand diagram to show what happens to the equilibrium price and quantity of chicken.

Figure A



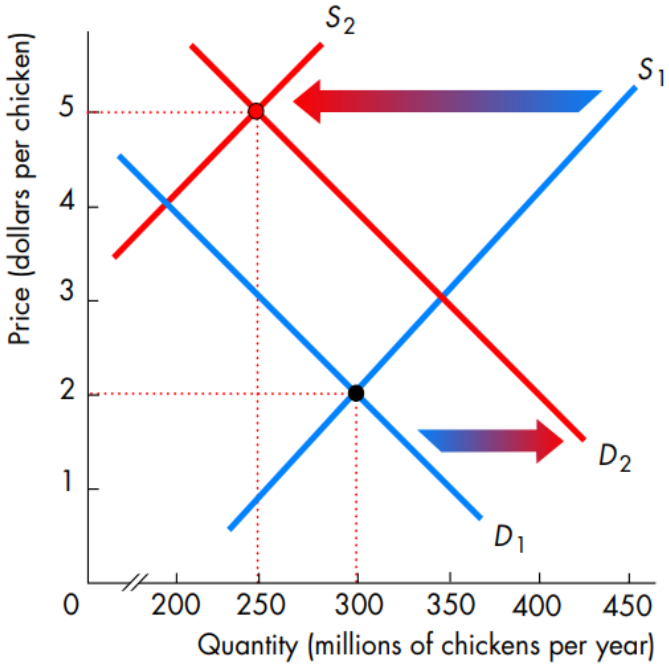


Figure B

➔ <u>If the demand increases and the supply decreases, the equilibrium price of a chicken rises.</u> But the effect on the quantity is ambiguous. Figures A and B reveal the nature of this ambiguity. In Figure A, the demand shift is larger than the supply shift, and the equilibrium quantity increases to 350 million chickens. But in Figure B, the magnitude of the shifts is reversed, and the supply shift exceeds the demand shift. Because the supply

shift is larger, the equilibrium quantity decreases to 250 million chickens. So unless you know which shift is larger, you cannot determine whether the quantity increases; decreases; or stays the same. However, regardless of the relative sizes of the changes in demand or supply, Figures A and B show that the price will unambiguously rise, coincidentally to $5 in both figures.