EXAM 2
Form 1
Solutions

1. The equilibrium price and quantity of any good or service is established by:
A. only demanders.
B. government regulations.
C. only suppliers.
**D.** both demanders and suppliers.

Equilibrium results from the interaction of demanders and suppliers.

2. Whenever the quantity demanded is not equal to the quantity supplied, the quantity that is actually sold in the market is:
A. the smaller of the quantity demanded and the quantity supplied.
B. the quantity demanded.
C. the quantity supplied.
D. the greater of the quantity demanded and the quantity supplied.

In disequilibrium, there is either excess demand or excess supply because the smaller-quantity side of the market determines the quantity sold.

3. You have noticed that there is a persistent shortage of teachers in an inner-city school district in your state. Based on this observation, you suspect that:
A. the wage for teachers at those schools is lower than the equilibrium wage.
B. the reservation price among teachers is lower than for other professions.
C. there is an excess supply of teachers.
D. the wage for teachers at those schools is higher than at other schools in the state.

A shortage implies that the quantity demanded is greater than the quantity supplied, and that the price is too low. The "price" of teachers is their wage.

Price 70
60
50
40
30
20
10

5 10 15 20 25 30 35 40 45

Quantity

4.
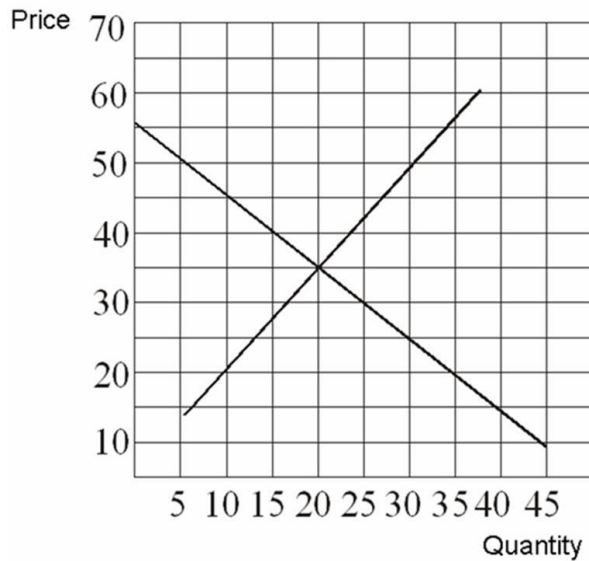
Refer to the figure above. When this market is in equilibrium:
A. the price is $30, and the quantity that will be sold is 15.
B. the price is $25, and the quantity that will be sold is 5.
C. the price is $25, and the quantity that will be sold is 20.
D. the price is $35, and the quantity that will be sold is 20.

The equilibrium quantity and price of a product are the values that correspond to the intersection of the supply and demand curves.

5. Suppose one knows two facts: first, the market for prescription drugs experiences chronic shortages and second, government sets the price for prescription drugs. One can conclude that the:
A. government has set the price below the equilibrium price.
B. buyers are hoarding prescription drugs.
C. government has set the price too high.
D. government has set the price above the equilibrium price.

If there is excess demand in a regulated market you know that the regulated price is lower than the equilibrium price.

6. According to the equilibrium principle:

A. market equilibrium exploits all opportunities for individual gain, but may not exploit gains possible through collective action.
B. unregulated markets tend to reach equilibrium prices and quantities without government regulation.
C. once a market has reached equilibrium, price will not change.
D. collective action cannot improve on individual action.

Individuals have an incentive to consider private costs and private benefits in deciding whether to make a trade, but may ignore social costs and social benefits.

7. "As the price of personal computers continues to fall, demand increases." This headline is inaccurate because:

A. a falling price for personal computers increases quantity demanded, not demand.
B. a change in the price of personal computers shifts the demand curve.
C. the statement is backwards: increased demand leads to lower prices.
D. a change in the price of personal computers shifts the supply curve.

A change in price leads to a change in quantity demanded because it is a change along a demand curve; a change in demand is a shift in the entire curve.
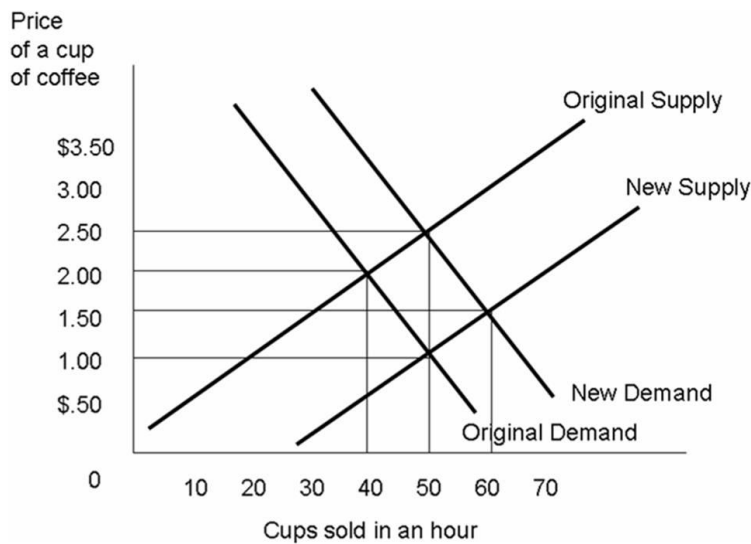
8.

Refer to the figure above. What might cause Demand to shift from the Original Demand to the New Demand?
A. An increase in the price of coffee creamer.
B. An increase in incomes.
C. An expectation that coffee prices will fall in the future.
D. A decrease in the price of tea.

An increase in incomes will shift demand for a normal good to the right.

9. Assume the demand for coffee increases while the supply decreases. Which of the following outcomes is certain to occur?
A. The equilibrium quantity of coffee will fall.
B. The equilibrium price of coffee will rise.
C. The equilibrium price of coffee will fall.
D. The equilibrium quantity of coffee will rise.

An increase in demand and decrease in supply both tend to increase price but have opposing effects in quantity.

10. Suppose that both supply and demand for iPads decrease. One can predict that the:
A. equilibrium price will rise but the equilibrium quantity can increase or decrease.
B. equilibrium price and quantity will rise.
C. equilibrium price and quantity will decrease.
D. equilibrium quantity will fall but the equilibrium price can rise or fall.
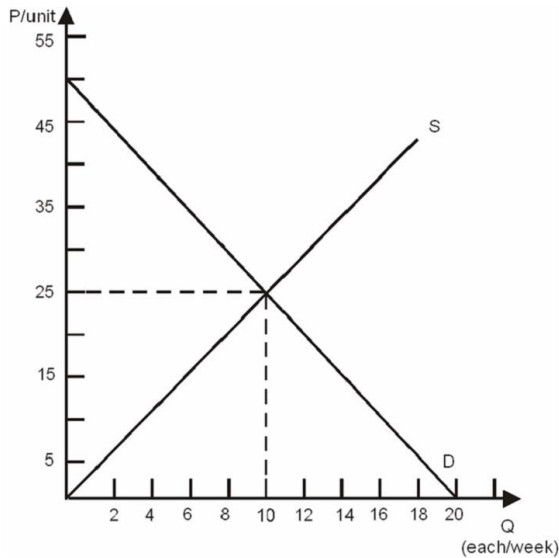
A decrease in supply and a decrease in demand both tend to decrease quantity, but have opposing effects on price.
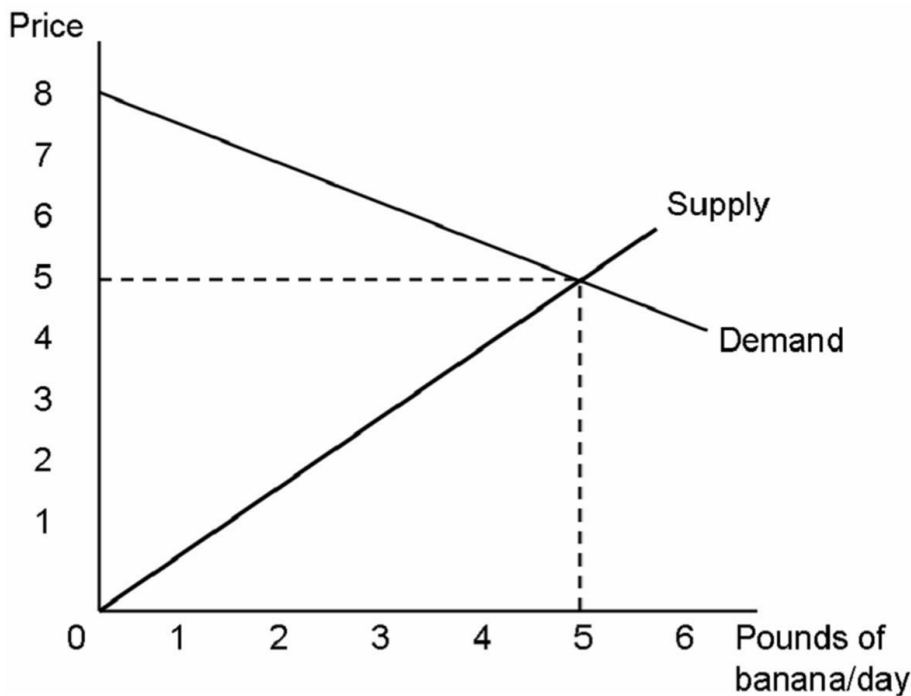
11.

Refer to the figure above. At the equilibrium price consumer surplus is
A. $40/day
B. $7.50/day
C. $15/day
D. $10/day

12.

Refer to the figure above. Total producer surplus received by the seller is
A. $200
B. $625
C. $125
D. $100

13. The sum of the economic surpluses accruing to buyers and sellers is:
A. producer surplus.
B. consumer surplus.
C. total economics surplus.
D. equal to profit.

Producer surplus plus consumer surplus equals total surplus.

14. Total economic surplus is greatest when:
A. consumer surplus and producer surplus are equal.
B. price controls keep prices low enough that most consumers can purchase the item.
C. consumer surplus exceeds producer surplus.
D. the market is in equilibrium.

The areas of the triangles that measure consumer surplus and producer surplus are largest in equilibrium.
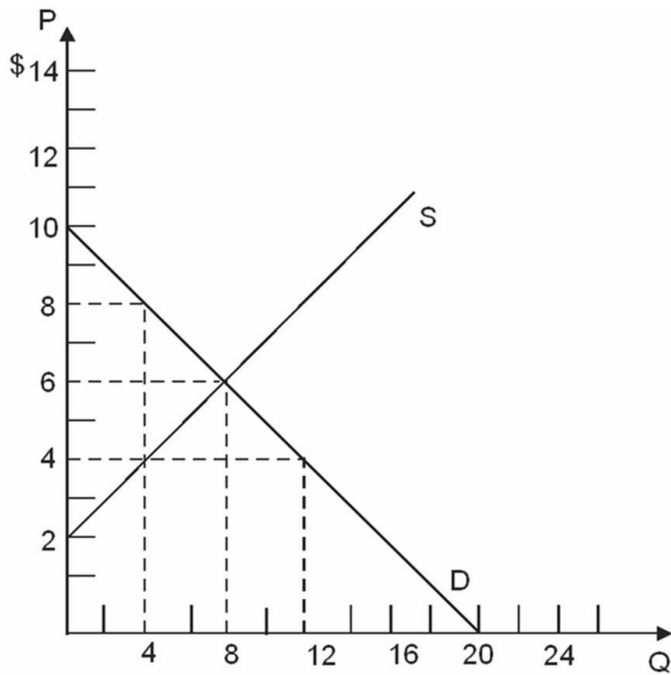
15.

Refer to the figure above. If the market is unregulated, the value of the total economic surplus is:
A. $48.
B. $20.
C. $32.
D. $84.

Producer surplus plus consumer surplus equals total surplus.

16. The percentage change in quantity demanded that results from the percentage change in price is known as the:
A. price elasticity of demand.
B. income elasticity of demand.
C. cross-price elasticity of demand.
D. price elasticity of supply.

Price elasticity of demand is the percentage change in quantity demanded that results from a 1 percent change in price.

17. If the price of textbooks increases by one percent and the quantity demanded falls by one-half percent, then the price elasticity of demand has a value of:
A. 0.05.
B. 0.5.
C. 2.
D. 5.

Price elasticity of demand is the percentage change in quantity demanded divided by the percent change in price, here -0.5/1 = -0.5. By convention, it is expressed as the absolute value.

18. The demand for a good is elastic with respect to price if the price elasticity of demand is:
A. equal to zero.
B. equal to one.
C. greater than one.
D. less than one.

If the percentage change in quantity is greater than the percentage change in price, then the elasticity will be greater than one. When elasticity is greater than one, demand is price elastic.

19. When the price of NBA ticket is $25 each, 30,000 tickets are sold every game. After the price rises to $30 each, 20,000 tickets are sold every game. At the original price, the demand for NBA ticket is:
A. unitary elastic.
B. elastic.
C. perfectly elastic.
D. inelastic.

The percentage change in quantity is 0.333 (10,000/30,000) and the percentage change in price is 0.2 ($5/$25). If the percentage change in quantity is greater than the percentage change in price, then the elasticity will be greater than one. When elasticity is greater than one, demand is price elastic.

20. If the consumers can easily switch to a close substitute when the price of a good increases, demand for that good is likely to be:
A. perfectly inelastic.
B. elastic.
C. inelastic.
D. unitary elastic.

If a good has a lot of substitutes, a small increase in price will motivate consumers to purchase the substitutes.

21. Demand tends to be _____ in the short run than in the long run.
A. less important
B. more inelastic
C. more elastic
D. more volatile

When consumers have more time to adapt to a price change, they are better able to find a substitute or make adjustments in consumption.

22. If the quantity demanded of a good is Q when the price for the good is P, the price elasticity of demand for that good at that point is:
A. Q*P*(1/slope)
B. (Q/P)*(1/slope)
C. (P/Q)*(slope)
D. (P/Q)*(1/slope)

The formula to use is (price/quantity)/(1/slope).

23. As one moves down along a linear demand curve (i.e., from high price, low quantity pairs to low price, high quantity pairs), the demand:
A. increases.
B. becomes more price elastic.
C. becomes less price elastic.
D. decreases.

At the top of the demand curve, a one unit change in price will be a relatively small percentage change and a one unit change in quantity, because it is a small quantity to begin with, will be fairly large. A large percentage quantity change relative to a small percentage change in price is elastic. The opposite is true at the bottom of a demand curve. Price is low, so a one-unit change is a fairly large percentage, but quantity is large so a one-unit change is a small percentage. This combination is associated with inelastic demand.

Demand for Lattes
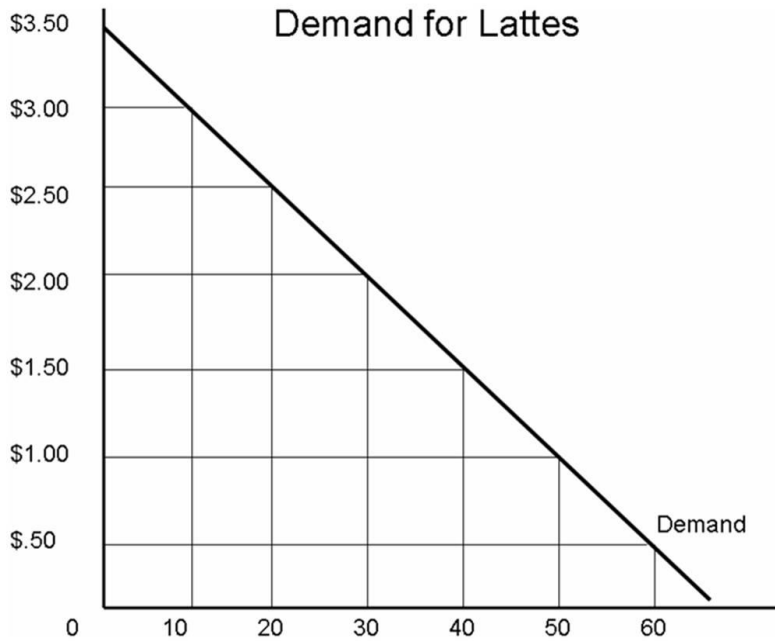
24.

Refer to the figure above. If the price of a latte increases from $2.00 to $2.50:
A. total revenue would stay the same.
B. total revenue would increase.
C. the change in total revenue, if any, would depend on the supply curve.
D. total revenue would decrease.

When price is $2.00 total expenditure is $2.00 × 30 = $60, when price is $2.50 total expenditure is $2.50 × 20 = $50.

25. A pizza shop observes that when it raises the price of the large pizza, total revenue from pizza decreases and when they lower the price of the large pizza, total revenue increases. This suggests that:
A. pizza lovers act irrationally.
B. there are few good substitutes for large pizza.
C. the demand for large pizza must be inelastic.
D. the demand for large pizza must be elastic.

Total revenues increase when price decreases and total revenues decrease when price increases when demand is elastic.

26. Suppose that total expenditures for coffee reach a maximum at a price of $5 per pound. At this price, the demand for coffee is:
A. perfectly inelastic.
B. unitary elastic.
C. inelastic.
D. elastic.

Total revenue is at its highest when elasticity equals one.

27. The responsiveness of quantity demanded for one good when the price of a different good changes is measured by the:
A. price elasticity of supply.
B. income elasticity of demand.
C. cross-price elasticity of demand.
D. price elasticity of demand.

Cross-price elasticity is the percentage change in quantity demanded when the price of a related good changes by one percent.

28. A cross-price elasticity of -1.2 indicates that the two goods under consideration are:
A. substitutes.
B. inferior.
C. complements.
D. elastically demanded.

Cross-price elasticity for complements is negative: a price increase of one will lead to a decrease in demand for the other.

29. You have found data that indicates that the income elasticity of demand for generic (unbranded) shampoo is -0.7. You conclude that generic shampoo:
A. is not in equilibrium.
B. has inelastic demand.
C. is an inferior good.
D. is a normal good.

Income elasticity is the percentage change in quantity consumed when there is a one percent change in income. For inferior goods, an increase in income leads to a decrease in consumption. When the changes are in the opposite directions, the sign on elasticity is negative.

30. The price elasticity of supply at a point is:
A. the percentage change in quantity supplied divided by the percentage change in price.
B. the change in quantity supplied divided by the change in price.
C. the percentage change in price divided by the percentage change in quantity supplied.
D. the change in price divided by the change in quantity supplied.

Price elasticity of supply at a point is the percentage change in quantity supplied divided by the percentage change in price.