Questions

1. Excess demand is the extent that
   a. quantity demanded exceeds quantity supplied
   b. quantity supplied exceeds quantity demanded
   c. the price ceiling is above the equilibrium price
   d. the price ceiling is below the equilibrium price
   e. the price floor is above the equilibrium price

2. If a price floor exceeds the equilibrium price, there will be
   a. excess demand
   b. excess supply
   c. satisfied suppliers
   d. dissatisfied consumers
   e. both a. and d.

3. If demand is perfectly elastic, an increase in supply will cause
   a. quantity and price to both increase
   b. quantity and price to both decrease
   c. quantity to increase and price to decrease
   d. quantity to decrease and price to increase
   e. quantity to increase and price to stay the same

4. An increase in population will cause
   a. demand to increase
   b. demand to decrease
   c. supply to increase
   d. supply to decrease
   e. both a. and c.

5. If income rises, the demand curve will
   a. shift right
   b. shift left
   c. stay the same since only price affects it
   d. cannot tell which way demand shifts with the information given
   e. become identical to the supply curve
6. For the following five questions, the supply curve is \( P = Q_s \) and the demand curve is \( Q_d = 35 \). Before any tax is imposed, the equilibrium price is:
   a. 25  
   b. 30  
   c. 35  
   d. 40  
   e. none of the above

7. If sellers must pay a tax of $10 per unit, what quantity is exchanged?
   a. 25  
   b. 30  
   c. 35  
   d. 40  
   e. none of the above

8. And what price will buyers pay?
   a. 25  
   b. 30  
   c. 35  
   d. 40  
   e. none of the above

9. And what price will the sellers keep (net of paying the tax)?
   a. 25  
   b. 30  
   c. 35  
   d. 40  
   e. none of the above

10. And how is the tax burden distributed across buyers and sellers?
    a. buyers pay it all  
    b. buyers pay more of the tax than sellers but not all of it  
    c. buyers and sellers each pay half the tax  
    d. sellers pay more of the tax than buyers but not all of it  
    e. sellers pay it all
Solutions

1a  Excess demand is the extent that quantity demanded exceeds quantity supplied.

2b  If a price floor exceeds the equilibrium price, there will be excess supply.

3e  If demand is perfectly elastic, an increase in supply will cause quantity to increase and price to stay the same.

4a  An increase in population will cause demand to increase.

5d  If income rises, the demand curve will: cannot tell which way demand shifts as depends on whether a normal or inferior good.

6c  The supply curve is $P = Q_s$ and the demand curve is $Q_d = 35$. Before any tax is imposed, the equilibrium price is 35 as $P=Q=35$.

7c  If sellers must pay a tax of $10 per unit, what quantity is exchanged? 35 because demand is perfectly inelastic at 35.

8e  And what price will buyers pay? None of the above (45). The supply curve shifts up to $P=10+Q_s$. Setting $Q_s=Q_d=35$, $P=10+35=45$.

9c  And what price will the sellers keep (net of paying the tax)? 35. $P_s=P_B-10=45-10=35$.

10a How is the tax burden distributed across buyers and sellers? Buyers pay it all. The full amount of the $10 tax goes into the price buyers pay going up because demand is perfectly inelastic.