1. Other than OPEC, the long lines at gas stations in the middle 1970’s were primarily a result of:
   a. a sharp increase in demand for gasoline needed for the Vietnam War.
   b. a sharp increase in demand for gasoline caused by demobilization, and a return to civilian life, after the Vietnam War.
   c. information problems in the market for gasoline.
   d. government regulations in the form of a price ceiling on gasoline.
   e. Americans’ increasingly moving to the suburbs which meant longer commutes.

2. According to the text, summer water shortages are most efficiently eliminated by:
   a. selling water in markets with flexible prices.
   b. government regulations lowering the price of water so that all can afford it.
   c. specifying the price of water in advance and guaranteeing that price through the summer.
   d. government regulations prohibiting/limiting the use of water for “low social value” uses such as watering of lawns.

3. Assume the market for pizza in Pittsburgh is initially allowed to market equilibrium. Further, assume that there are no information problems or externalities associated with pizza. Then, the government takes steps forcing producers to increase their production of pizza. Which of the following is true?
   a. People value, in $ terms, the last pizzas produced more than it costs to produce them.
   b. People value, in $ terms, the last pizzas produced the same as it costs to produce them.
   c. People value, in $ terms, the last pizzas produced less than it costs to produce them.
   d. Production costs will likely fall. The costs of producing the last pizzas could, therefore, be either above or below people’s valuation of the pizzas.

4. Assume that, in the market for X, all buyers and sellers have perfect information about their costs and benefits. No one knows anyone else’s benefits or costs, however. Further, assume there are no externalities. Markets, without government intervention, would tend to:
   a. achieve the maximum possible gain (in $ valuation) for society.
   b. fail to achieve the maximum possible gain (in $ valuation) for society because no one knows anyone else’s valuation or costs.
   c. fail to achieve the maximum possible gain (in $ valuation) for society because buyers and sellers will selfishly.
5. Assume that, in the market for $X$, all buyers and sellers have perfect information about their costs and benefits. No one knows anyone else’s benefits or costs, however. Further, assume there are no externalities. If, instead of markets, government planning with the goal is to maximize the gains to society (in $ valuation) is used:
   a. the gain achieved (using $ valuations) will likely be greater than that of markets.
   b. the gain achieved (using $ valuations) will likely be exactly equal to that of markets.
   c. the gain achieved (using $ valuations) will likely be less than that of markets.

6. (5 pts) Bob buys a boat from Sally for $5,000. Assume both parties have perfect information as to the quality of the boat. Further assume, no externalities are generated by this boat. Bob would have been willing to pay up to $6,000 for the boat. Sally, the seller, is pretty happy with the sale as well. Answers the two questions below.

   How much consumer surplus did Bob get from the sale?
   a. $11,000  
   b. $6,000  
   c. $5,000  
   d. $3,000  
   e. $2,500  
   f. $1,000  
   g. $500  
   h. Definitely some positive amount. More information is needed to determine the actual amount however.
   i. Not enough information is given to determine whether his consumer surplus is positive or negative.

   How much producer surplus did Sally get from the sale?
   a. $11,000  
   b. $6,000  
   c. $5,000  
   d. $3,000  
   e. $2,500  
   f. $1,000  
   g. $500  
   h. Definitely some positive amount. More information is needed to determine the actual amount however.
   i. Not enough information is given to determine whether her producer surplus is positive or negative.

7. Assume that binding rent controls are imposed on apartments in downtown Fort Worth. If these rent controls are strictly enforced, what will determine who gets the apartments?
   a. Those who have the highest willingness and ability to pay for the apartments get them.
   b. Those who remain on waiting lists the longest get the apartments.
   c. All buyers willing and able to pay the price ceiling or more, get apartments.
   d. Those buyers with low willingness and abilities to pay, but still willing to pay above the price ceiling, get apartments.
   e. Buyers with a willingness and ability to pay that is below the price ceiling get the apartments.
8. (5 pts) Assume the market for Motel Rooms in Scottsbluff, Nebraska is described by the supply and demand curves shown below. There is no government intervention (other than enforcing contracts and protecting property) in the market.

- What is the level of Consumer Surplus (per day) generated by the market? ________________
- What is the level of Producer Surplus generated by the market? ________________

![Diagram of Market for Motel Rooms in Scottsbluff, NE]

9. Assume that the Russian government imposes a binding price ceiling on vodka in February of 2003. A survey, considered to be highly accurate, is conducted 1 month later. It indicates that the quantity of vodka sold has decreased by 10% and the quality of Vodka has remained roughly the same. What is one likely to see in a few years?

a. The quantity of vodka sold falls by even more. Quality decreases.
b. The quantity of vodka sold falls by even more. Quality increases.
c. The quantity of vodka rebounds to (or closer to) the pre-ceiling level. Quality decreases.
d. The quantity of vodka rebounds to (or closer to) the pre-ceiling level. Quality increases.
10. (7.5 pts) Assume the market for Motel Rooms in Scottsbluff, Nebraska is described by the supply and demand curves shown below. Then, the government imposes a $40 price ceilings on motel rooms.

- What is the **maximum** level of Consumer Surplus (per day) after the price ceiling? __________________
- What is the level of Producer Surplus after the price ceiling? ________________
- What is the level of **minimum** Deadweight Loss generated after the price ceiling? ________________

[Diagram of market demand and supply curves]

11. _____ Why might the level of consumer surplus be lower than the maximum you indicated in 10 above? **Dropped. Error on answer a.**
   a. Markets no longer assure that **sellers** who “value” the rooms most are most likely to get them.
   b. Consumer surplus, by definition, is based on what buyers pay, not how much they value a good.
   c. Demand for the product will likely increase due to the price ceiling.
   d. It would not be lower than the maximum. For a given supply, demand, and price ceiling, the level of consumer surplus is always a definite thing.
12. _____ If a price ceiling is not binding:
   a. the market equilibrium price is above the ceiling.
   b. the market equilibrium price is below the ceiling.
   c. it was imposed by the private sector, not government.
   d. people must voluntarily abide by it.
   e. the legislature has authorized the price ceiling (ex. Congress), but the executive (ex. President) needs to enact it.

13. _____ Assume that a binding price ceiling is imposed. Which of the following is true regarding buyers (an potential buyers) in that market? Assume that neither demand nor supply is infinitely elastic in the short-run.
   a. All buyers gain in the short-run.
   b. All buyers lose in the short-run.
   c. Some buyers lose, some gain in the short-run.

14. _____ Assume that a binding price ceiling is imposed. Which of the following is true regarding buyers (an potential buyers) in that market? Assume that neither demand nor supply is infinitely elastic in the short-run.
   a. As a group, buyers will definitely gain more than before.
   b. As a group, buyers will likely gain if supply is quite inelastic.
   c. As a group, buyers will likely gain if supply is quite elastic.
   d. As a group, buyers will definitely lose relative to what they had before.

15. _____ Assume that a binding price ceiling is imposed. Which of the following is true regarding sellers (an potential sellers) in that market? Assume that neither demand nor supply is infinitely elastic in the short-run.
   a. All sellers gain in the short-run.
   b. All sellers lose in the short-run.
   c. Some sellers lose, some gain in the short-run.

16. _____ Funding Social Security and Medicare is a major issue in politics today? The payroll (i.e. FICA) tax funds these programs. Currently, employers and employees are both responsible for the same share of the FICA tax. Employers must send the government 7.65% of what they pay workers. Employees also owe the government 7.65% of what they are paid. **Senator Sally Salucas has proposed raising the rate employers legally owe to 10%, while leaving the amount employees legally owe unchanged. How would the burden of this tax increase be distributed?**
   a. employers will bear all of the burden of this tax increase
   b. employers will bear most, but not all, of the burden of this tax increase
   c. employees will bear most, but not all, of the burden of this tax increase
   d. employees will bear all of the burden of this tax increase
   e. The burden will be split between the two groups. However, more information is needed to know exactly how it will be split.
17. Assume that a binding price ceiling is imposed. Which of the following is true regarding sellers (an potential sellers) in that market? Assume that neither demand nor supply is infinitely elastic in the short-run.
   a. As a group, sellers will definitely gain more than before.
   b. As a group, sellers will likely gain if demand is quite inelastic.
   c. As a group, sellers will likely gain if demand is quite elastic.
   d. As a group, sellers will definitely lose relative to what they had before.

18. (10 pts) Assume the market for Motel Rooms in Scottsbluff, Nebraska is described by the supply and demand curves shown below. Then, the government levies a $30 tax on each room rented. The legal incidence of this tax is on sellers. i.e. Sellers are the ones required to send the tax payments to the government.

- What is the level of Consumer Surplus (per day) after the tax? 
- What is the level of Producer Surplus after the tax? 
- What is the level of Tax Revenues generated after the tax? 
- What is the level of Deadweight Loss generated after the tax?
19. (10 pts) Assume the market for Motel Rooms in Scottsbluff, Nebraska is described by the supply and demand curves shown below. These are the same supply and demand curves as in question 18. Then, the government levies a $30 tax on each room rented. The legal incidence of this tax is on buyers. i.e. Buyers are the ones required to send the tax payments to the government. Assume that, physically, it is no harder for buyers to send the tax to the government than it was for sellers.

The tax office is right across from the motels.
- What is the level of Consumer Surplus (per day) after the tax? _______________
- What is the level of Producer Surplus after the tax? ______________
- What is the level of Tax Revenues generated after the tax? ______________
- What is the level of Deadweight Loss generated after the tax? ______________
20. Assume the elasticity of demand for car rentals in Carson city is: \( ED = 0.5 \). The elasticity of supply is: \( ES = 2.0 \). Assume a $10 tax is imposed on car rentals. The legal incidence of this tax is on sellers. Which of the following is likely true?
   a. Sellers will bear the entire incidence of this tax. They will receive $10 less per car rental after taxes.
   b. Sellers will bear most, but not all, of the incidence of this tax. Sellers will receive, say, $7.50 less per car rental after taxes. Buyers will pay, say, $2.50 more after the tax.
   c. The burden of the tax will be split almost equally between buyers and sellers. Buyers will pay $5 more and sellers will receive $5 less after taxes.
   d. Buyers will bear most, but not all, of the incidence of this tax. Buyers will pay, say, $7.50 more after the tax. Sellers will receive, say, $2.50 less per car rental after taxes.
   e. Buyers will bear the entire incidence of this tax. They will pay $10 more per car rental.

21. Donnie is a budding economist. He or she states; “Markets maximize the sum of consumer and producer surplus, Therefore, markets maximize social well-being.” Which of the following is true?
   a. Donnie is correct.
   b. Donnie is correct only if he or she is willing to assume that the amount a buyer is willing to pay for something represents that item’s value to society.
   c. Donnie is incorrect. Markets come close to maximizing social welfare and are “low maintenance”. However, a social planner could always improve on them somewhat.
   d. Donnie is incorrect. Markets maximize firm’s profits but tend to generate less well-being for consumers than government controlled economies.

22. (10 pts) Assume that a binding price floor is imposed on the market for taxi cab rides in Transylvania. Enforcement of the price floor is pretty good. Which of the following are likely results? Check (✓) any, all, or none of the blanks.
   ✓ The quality of taxi rides increases over time.
   ✓ The buyer’s $ valuation of the last ride sold is less than the marginal cost of producing that ride.
   ✓ More resources are devoted to producing taxi rides than are necessary to produce the number of taxi rides actually sold.
   ✓ Some taxi drivers illegally charge more than the price floor.
   ✓ Some taxi drivers illegally charge less than the price floor.

23. The country of Econostan imposes a binding price ceiling on heating cooking oil. Enforcement of this price ceiling is very good. Which of the following is a likely result?
   a. Less cooking oil will be made available to consumers.
   b. Cooking oil will be more available to more consumers. However, this will come at great cost on the part of sellers.
   c. If supply is relatively elastic, more cooking oil will be made available to consumers. If supply is relatively inelastic, less cooking oil will be made available.
   d. If supply is relatively elastic, less cooking oil will be made available to consumers. If supply is relatively inelastic, more cooking oil will be made available.
24. _____ Assume that the $ amounts people are willing to pay for something are a true measure of a products value. Compared to a social planner, markets will be: **Dropped. Error on answers b & c.**
   a. more likely to maximize social welfare since they do not require buyers and sellers to know their own benefits and costs.
   b. more likely to maximize social welfare since they do not require anyone to know other’s benefits and costs.
   c. less likely to maximize social welfare since they do not require buyers and sellers to know their own benefits and costs.
   d. less likely to maximize social welfare since they do not require anyone to know other’s benefits and costs.

25. _____ Ted Kazinsky benefits exactly $0 (none) from programs financed by the Montana state government. Although he tries to avoid them, Ted pays $1,000 in sales taxes to the state. These taxes have cost Ted:
   a. more than $1,000.
   b. $1,000.
   c. more than $1,000.

26. _____ It’s 1992 and Gwendolyn is planning on buying a 115’ yacht. However, the government imposes a “luxury tax” on yachts over 100’ in length. Because of this, Gwendolyn decides to buy a 95’ yacht (from the same company) and pays no tax. This is an example of:
   a. a head tax
   b. a tax shifting producer surplus to consumers.
   c. a tax shifting consumer surplus to producers.
   d. a tax with no cost to society.
   e. a deadweight loss.

27. _____ A binding price ceiling that is effectively enforced will:
   a. cause a shortage and fewer units to be produced.
   b. cause a shortage and more units to be produced.
   c. cause a surplus and fewer units to be produced.
   d. cause a surplus and more units to be produced.

*Happy Halloween!*