1. A social planner whose goal is to maximize the net gain to society will:
   a. find it hard to accurately determine how much each person values a good or service.
   b. maximize consumer surplus at the expense of lower producer surplus.
   c. maximize producer surplus at the expense of lower consumer surplus.
   d. tend to do a better job of maximizing consumer surplus + producer surplus than markets, but do
      worse job of encouraging innovation.

2. Karl is a neuvo-Marxist. He believes in the Marxist tenet of “from each according to their
   ability, to each according to their needs”. Unlike most Marxists, however, he believes that
   the maximum amount of $’s a buyer is willing to pay for a good accurately measures their need for
   that good. He also believes the most accurate measure of "ability to give" is the minimum amount
   of $ a seller is willing to sell a good for. A low $ amount on the part of sellers indicates a high
   ability to give. Markets will:
   a. do a good job of fulfilling his neuvo-Marxist tenet.
   b. fulfill his neuvo-Marxist tenet for producers, but not for buyers.
   c. fulfill his neuvo-Marxist tenet for buyers, but not for sellers.
   d. not do a very good job of fulfilling his neuvo-Marxist tenet.

3. Assume the city of Boulder, Colorado imposes rent controls, below the equilibrium price, on
   apartments. Which of the following is a likely result?
   a. potential renters are more likely to bribe landlords to give them an apartment.
   b. personal relationships between the renter and landlord play less of a role in determining who
      gets an apartment.
   c. renters move from apartment to apartment in Boulder more often.
   d. both b & c
   e. all of the above

4. Which of the following is true of the Earned Income Credit (EIC)? The EIC is sometimes called
   the Earned Income Tax Credit (EITC).
   a. The EIC is a tax on corporate earnings (i.e. profits).
   b. The EIC is a tax on wages and salaries. EIC tax revenues go toward Social Security and
      Medicare.
   c. The EIC pays money to employers when they hire workers who recently got off TANF
      (Temporary Assistance to Needy Families).
   d. The EIC pays a certain amount of money to low income individuals for every dollar they earn.
   e. The EIC allows a taxpayer to shift his or income from one year to the next to smooth out their
      tax payments.

5. Education vouchers are payments given to a household from the government when that household
   spends money on private education. Education vouchers:
   a. are a subsidy for an activity producing external benefits.
   b. are a subsidy for an activity producing external costs.
   c. cause sellers to be buyers and buyers to be sellers. This transposition causes education
      externalities to be internalized.
   d. represent the Coase theorem working as predicted.
   e. represent a flaw in Coase’s argument that government prefers to provide all public goods by
      itself.
#’s 6 – 11. The short-run (1 year or less) market supply and demand curves for bread are shown below. Then, the government imposes a price ceiling of $3 on bread.

6. How much bread will be sold in this market after the price ceiling is imposed? Dropped. There was an error on the other version.
   a. 600 loaves/day
   b. 500 loaves/day
   c. 400 loaves/day
   d. 300 loaves/day
   e. 200 loaves/day

7. How are sellers affected by this price floor?
   a. They will definitely be worse off.
   b. They could be worse off or better off depending on their elasticity.
   c. They will definitely be better off.

8. What is the Maximum level of consumer surplus which can result after the price ceiling is imposed?
   a. $300
   b. $450
   c. $600
   d. $1,350
   e. none of the above

9. Consider the case (s indicated in # 7 above in which the maximum level of consumer surplus is generated. Which of the following are then true?
   a. While this is the most likely scenario, it fails to measure the improvements in the quality of bread that will likely result.
   b. The consumer surplus likely overstates the gains to consumers. More consumers are gaining, but the rich are largely excluded. The rich value the bread more than the poor.
   c. While society as whole gains, buyers lose approximately $2 for every $1 that sellers gain from this.
   d. First, it is unlikely the particular buyers needed to maximize consume surplus will be the ones to get the bread. Secondly, if they do get the bread, the price ceiling has likely helped the rich more than the poor.

10. Which of the following is the most likely quantity sold after the price ceiling has been in effect for 4 years? Assume there has been no change in population, buyers’ income, etc.
    a. 600 loaves/day
    b. 500 loaves/day
    c. 400 loaves/day
    d. 300 loaves/day
    e. 200 loaves/day
11. What will likely happen to the quality of each loaf of bread in the long-run?
   a. The quality of each loaf increases.
   b. The quality of each loaf remains unchanged.
   c. The quality of each loaf decreases.

12. What typically happens to deadweight loss when the tax rate on a good is doubled?
   a. Deadweight loss decreases slightly.
   b. Deadweight loss is unchanged.
   c. Deadweight loss increases, but it less than doubles.
   d. Deadweight loss (approximately) doubles.
   e. Deadweight loss more than doubles.

13. Taxing which good will raise the most revenues? Each good is selling for $10 before the tax. 10,000 units of each good are being sold before the tax.
   a. Good A: $E_D = 0.3$, $E_S = 1.4$
   b. Good B: $E_D = 0.4$, $E_S = 0.7$
   c. Good C: $E_D = 1.0$, $E_S = 0.6$
   d. Good D: $E_D = 1.5$, $E_S = 0.5$

14. In the 1980’s economists called supply-siders advised President Ronald Reagan. They argued that if income taxes were cut, the tax base would grow so much that tax revenues might actually rise. More taxes would be collected at the lower rate according to these supply-siders. The supply-siders were assuming that:
   a. both supply and demand for labor were relatively elastic.
   b. supply of labor was relatively elastic. Demand for labor was very inelastic.
   c. demand for labor was relatively elastic. Supply of labor was very inelastic.
   d. both supply and demand for labor were relatively inelastic.
   e. all people valued a good equally regardless of income.

15. Mankiw’s text discussed a tax advocated by Henry George in Progress and Poverty. This tax is:
   a. a tax of a uniform rate (i.e. a flat tax) on all income.
   b. a head tax
   c. a tax on all real (estate) property; land, buildings, etc.
   d. a tax on unimproved land.
   e. a general sales tax

16. Why did Henry George advocate the tax he did?
   a. He believed the tax was good on equity grounds, but bad in terms of efficiency. However, more output is not the answer. Living better than past generations does not make us happy.
   b. He believed the tax was good both in terms of efficiency and equity.
   c. He believed the tax was good on efficiency grounds, but bad in terms of equity. However, Henry George inequities in society were fleeting. Today’s poor are tomorrow’s rich.
   d. He believed ownership of property other than clothing and personal items was an injustice.

17. In terms of efficiency, which is the best good to tax (assuming no externalities)?
   a. Good A: $E_D = 1.5$, $E_S = 0.5$
   b. Good B: $E_D = 1.0$, $E_S = 0.6$
   c. Good C: $E_D = 0.4$, $E_S = 0.7$
   d. Good D: $E_D = 0.3$, $E_S = 1.4$
18. The government of Liberia is instituting a public retirement program similar to the American Social Security system. The government taxes $0.50 for each hour worked. Workers are responsible for sending half ($0.25) of this tax to the government. Firms are responsible for sending the other half ($0.25) to the government. Workers are desperate to work in Liberia. Firms, however, can easily shift their production to other countries. The economic incidence of this tax:
   a. falls mostly on the workers.
   b. is split 50/50 between workers and firms.
   c. falls mostly on firms.
   d. is zero. There is no economic incidence.

19. Karen wants Kentucky to get rid of its state lottery. Her argument is as follows. “The government keeps $0.50 of every $1 spent on lottery taxes essentially making it a tax. Further, the average poor Kentuckians spends more on lottery tickets than does the average rich Kentuckian. The lottery is a tax in which the poor pay more than the rich.” Karen is arguing that the lottery:
   a. violates the principle of vertical equity.
   b. violates the principle of horizontal equity.
   c. has a very high deadweight loss.
   d. has a low deadweight loss, but only because the poor have fewer dollar votes.
   e. violates the principle of habeus corpus

20. There is a $2/ticket tax on movie tickets. Stan was thinking about going to see The Lion, the Witch, and the Wardrobe. However, the price is just a little bit too high for his taste. He stays home instead. What is this an example of?
   a. part of the surplus generated by a market being transferred to those who benefit from government programs
   b. a pigouvian tax
   c. an auto-ressessive tax
   d. a progressive tax
   e. a deadweight loss

21. There is a $2/ticket tax on movie tickets. Fran goes to a movie and pays the posted price. The theatre sends $2 to the government in taxes. What is this an example of?
   a. part of the surplus generated by a market being transferred to those who benefit from government programs
   b. a pigouvian tax
   c. an auto-ressessive tax
   d. a progressive tax
   e. a deadweight loss
Answer #’s 22 – 26 based on the market supply and demand curves below. Assume a $30 per unit tax is placed on the good.

22. How much Consumer Surplus is generated by this market after the tax?
   a. $12,250  
   b. $9,000  
   c. $6,125  
   d. $4,500  
   e. none of the above

23. How much Tax Revenue is generated by this market after the tax?
   a. $4,125  
   b. $4,500  
   c. $8,250  
   d. $9,000  
   e. none of the above

24. What is the Deadweight Loss in this market after the tax?
   a. $3,000  
   b. $4,500  
   c. $6,000  
   d. $9,000  
   e. none of the above

25. What is the total amount a buyer pays for a unit after the tax is levied?
   a. $70  
   b. $60  
   c. $55  
   d. $30  
   e. none of the above

26. What is the total amount a seller keeps for selling a unit after the tax is levied?
   a. $10  
   b. $25  
   c. $30  
   d. $40  
   e. none of the above

27. It's Halloween and Bob is shopping for a costume. He would definitely benefit from a Batman costume. In fact, he is willing to pay up to $25 for one. High demand from other shoppers, however, has driven the market price up to $30. Bob does not buy one. This is an example of:
   a. a positive externality.  
   b. a negative externality.  
   c. markets internalizing the costs and benefits of affected parties.  
   d. perfect price discrimination.  
   e. shifting of legal incidence.
#’s 28 – 30: Below you have tax tables for three different countries. Use it to classify each country’s income tax system.

<table>
<thead>
<tr>
<th>Income</th>
<th>Country 1 Amount of Tax Owed</th>
<th>Country 2 Amount of Tax Owed</th>
<th>Country 3 Amount of Tax Owed</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>$1,000</td>
<td>$2,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>$20,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>$30,000</td>
<td>$10,000</td>
<td>$6,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

28. _____ What kind of income tax system does country 1 have?
   a. an orthogonal tax
   b. a pigouvian tax
   c. a progressive tax
   d. a proportional tax
   e. a regressive tax

29. _____ What kind of income tax system does country 2 have?
   a. an orthogonal tax
   b. a pigouvian tax
   c. a progressive tax
   d. a proportional tax
   e. a regressive tax

30. _____ What kind of income tax system does country 3 have?
   a. an orthogonal tax
   b. a pigouvian tax
   c. a progressive tax
   d. a proportional tax
   e. a regressive tax

31 – 33: Fran, Gertrude, and Harriet are all government ministers discussing the liquor tax in the country of Vinland. Most Vinlanders, rich and poor, drink some alcohol every day.

   Fran’s sole concern is economic efficiency.
   Gertrude’s sole concern is correcting for externalities.
   Harriet’s sole concern is equity. She believes all taxes should be highly progressive.

31. Fran, based on her efficiency concerns, would likely:
   a. favor liquor being taxed at a higher rate than most other goods.
   b. favor liquor being taxed at a the same rate as most other goods.
   c. favor liquor being taxed at a lower rate than most other goods.
   d. advocate drinking at least one serving of alcohol at each meal.

32. Gertrude, based on her concerns regarding externalities, would likely:
   a. favor liquor being taxed at a higher rate than most other goods.
   b. favor liquor being taxed at a the same rate as most other goods.
   c. favor liquor being taxed at a lower rate than most other goods.
   d. advocate drinking at least one serving of alcohol at each meal.
33. Harriett, based on her concern for equity, would likely:
   a. favor liquor being taxed at a higher rate than most other goods.
   b. favor liquor being taxed at a the same rate as most other goods.
   c. favor liquor being taxed at a lower rate than most other goods.
   d. advocate drinking at least one serving of alcohol at each meal.

34. It is 1832. Fran runs a shipping company out of Currituck, North Carolina. There are other shipping companies, but Fran’s is the largest. He builds a lighthouse to keep his ships off the rocks. Since he does not know the exact time his ships come in, the lighthouse is lit up all night, every night. This is an example of:
   a. a positive externality.
   b. a negative externality.
   c. markets internalizing the costs and benefits of affected parties.
   d. perfect price discrimination.
   e. shifting of legal incidence.

35. Stella lives in the suburbs. She seldom mows her lawn, parks junk cars in front of her house, and has loud, late night parties. Her neighbors would care less about how she lives, except that are often woken up at night and their property values have fallen. This is an example of:
   a. a positive externality.
   b. a negative externality.
   c. markets internalizing the costs and benefits of affected parties.
   d. perfect price discrimination.
   e. shifting of legal incidence.

36. Feces from chicken farms near the Chesapeake Bay harms commercial fisherman as well as recreational boaters. Not all farms have the same amount of runoff into nearby streams. Advances in satellite imagery and computerized analysis make it cheap and easy for the government to accurately measure how much feces each farm releases in to the bay. This development will likely make:
   a. a pollution tax a better option than before.
   b. a pollution tax a worse option than before.
   c. direct government regulation the only viable option.
   d. both b & c

37. Which of the following is a weakness of using “direct regulations and standards” to address the problem of pollution?
   a. Direct regulations and standards always help buyers, but seldom help sellers.
   b. Direct regulations and standards always help sellers, but seldom help buyers.
   c. Direct regulations and standards provide poor incentives for the private sector to develop more efficient means of reducing pollution.
   d. Direct regulations and standards, by nature, ignore the costs and benefits of sellers and buyers. Third parties are always given too much emphasis.
38. The problem with positive externalities is that:
   a. the sellers’ share of surplus dwarfs that of the buyers.
   b. the buyers’ share of surplus dwarfs that of the sellers.
   c. the private sector will do too much of the activities which produce them.
   d. the private sector will do too little of the activities which produce them.
   e. mostly a myth. Individuals know their own desires better than any government planner can.

# 39 – 40. The market supply and demand curves for Good X are shown below. Assume $10 in external costs are generated every time a unit of X is sold.

39. What is the socially optimal amount of good X?
   a. 500 units
   b. 400 units
   c. 300 units
   d. 200 units
   e. 0 units

40. Which of the following would best correct for this externality?
   a. a tax of $10/unit with the legal incidence on sellers
   b. a tax of $10/unit with the legal incidence on buyers in combination with $10/unit subsidy going to sellers
   c. a tax of $10/unit with the legal incidence on sellers in combination with $10/unit subsidy going to buyers
   d. a tax of $20/unit with the legal incidence on sellers
   e. a subsidy of $10/unit given to buyers