1. Assume the market for iron in the 18th century is initially in equilibrium. Then, inventors discover how to use coal instead of charcoal (charred wood) to make iron. Coal is much cheaper and easier to use than charcoal. What market condition would result if price does not (or is not allowed to) change? Assume supply and demand are neither perfectly elastic or perfectly inelastic.
   a. shortage, upward pressure on price
   b. shortage, downward pressure on price
   c. surplus, upward pressure on price
   d. equilibrium, upward pressure on price
   e. none of the above

2. Assume the market for beef in the 1870’s is initially in equilibrium. Then, many new ranchers enter the cattle raising business. What will happen to the market for beef? Assume markets are allowed to adjust and that supply and demand are neither perfectly elastic or perfectly inelastic.
   a. price increases, quantity increases
   b. price increases, quantity decreases
   c. price decreases, quantity increases
   d. price decreases, quantity decreases
   e. uncertain, it depends on the slope of both supply and demand

3. What will these two changes do to the equilibrium price of furs? ←D and ←S
   a. increase
   b. decrease
   c. uncertain

4. What will these two changes do to the equilibrium quantity of furs? ←D and ←S
   a. increase
   b. decrease
   c. uncertain

5. The (own price) elasticity of demand for Mr. Pareto Head dolls is 1.5. Assume the company raises the price of these dolls by 10%. How much will sales of these dolls change? Assume that this elasticity of demand does not change as price is raised.
   a. + 10%
   b. + 6.66%
   c. – 6.66%
   d. – 10%
   e. none of the above (–15%)
Assume the market for air travel in the U.S., a normal good, is in equilibrium. Then two things happen. 1) Al Quaeda and related groups are soundly defeated. Airlines no longer have to undertake the very expensive security measures they used to. 2) Average incomes in the U.S. increase greatly. Unfortunately, the size of this either of these effects on the market, is as of yet unknown.

6. What will these two changes do to the equilibrium price of air travel in the U.S.? →S and →D
   a. increase
   b. decrease
   c. uncertain

7. What will these two changes do to the equilibrium quantity of air travel in the U.S
   a. increase
   b. decrease
   c. uncertain

8. If a good has a high (own price) elasticity of demand, this means:
   a. buyers change their behavior a lot as they get richer
   b. buyers change their behavior a lot when that goods price rises only a small percent
   c. sellers change their behavior a lot as buyers get richer
   d. sellers change their behavior a lot as consumer demand changes
   e. none of the above

9. Which of the two goods would likely have the highest (own price) elasticity of demand? Assume both goods considered to be halfway in between a luxury and a necessity.
   a. Caribbean cruises
   b. matches
   c. The two should have identical elasticities except for small statistical errors.

10. Archie Aranda, your best friend from college has become an archeologist. He is currently excavating a site in Cuba and is very excited to have begun to decipher this ancient cultures language. So far he has deciphered the following: “Income elasticity of demand for C·॥॥ is –0.5.” Help Archie out. What can you tell him about C·॥॥?
    a. C·॥॥ was likely a small item in a typical person’s budget.
    b. C·॥॥ likely had very few substitutes.
    c. C·॥॥ is an inferior good.
    d. C·॥॥ is a normal good, but probably not a luxury good.
    e. none of the above

11. Amanda Lovett has drawn one of her first demand curves (shown at right). What is true of the (own price) elasticity of demand along this demand curve?
    a. demand is elastic
    b. demand is unit elastic
    c. demand is inelastic
    d. the elasticity of demand varies along the curve. It is most elastic towards the top (ex. pt. W)
    e. the elasticity of demand varies along the curve. It is most elastic towards the bottom (ex. pt. Z)
12. Which of the two goods would likely have the **highest** (own price) elasticity of demand?
   a. all women’s socks
   b. Silver Toe brand women’s socks
   c. The two should have identical elasticities except for small statistical errors.

13. What is the (own price) price elasticity of demand for Pareto Optimus shoes over this range?
   a. 2
   b. 0.66
   c. 0.5
   d. 0.33
   e. none of the above

14. Which of the following best describes the demand for Pareto Optimus shoes over this range?
   a. elastic
   b. proportional
   c. inelastic
   d. dis-proportional
   e. unit elastic

15. Brenda is a consultant for small restaurants. She is currently advising Madame Crayfish’s Canjun Café. She estimates that the (own price) elasticity of demand for their meals is currently 0.65. What can and should Madame Crayfish do to raise total revenues if she really believes the number is accurate?
   a. keep price and quantity as they are
   b. raise price but still sell the same amount of crayfish
   c. lower price but still sell the same amount of crayfish
   d. raise price and, accordingly, sell fewer crayfish
   e. lower price in an attempt to sell more crayfish

16. Farmer Fran is the chair of the Chugwater, Wyoming Sheep Raisers Association. She and the 50 other sheep raisers in the Chugwater area are holding a meeting. Given the current world price, Fran and the other area ranchers are making as much total revenue as they can. Fran has just received a United nations report that the (own price) elasticity of demand for wool is 0.6. What should farmer Fran do to increase her total revenue?
   a. increase her production of wool unilaterally. i.e. She should increase production even if none of the other 49 Chugwater sheep raisers do the same.
   b. decrease her production of wool unilaterally. i.e. She should decrease production even if none of the other 49 Chugwater sheep raisers do the same.
   c. increase her production of wool only if she can get most of the other 49 Chugwater sheep raisers to do the same.
   d. decrease her production of wool only if she can get most of the other 49 Chugwater sheep raisers to do the same.
   e. none of the above. Fran should leave her production levels unchanged.

   **Key:** Fran and the other 48 Chugwater ranchers are still only a tiny part of the market. They can’t effect price much. They face a very elastic $E_D$.

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¹ Silver Toe brand is mid-level quality. It is neither the top of the line, nor the bottom of the line, in women’s socks.
#'s 17 – 19: You’ve graduated from TCU and have gotten a great, high paying job as an economic analyst for the Rabbit Ridge Wineries. You are about to make an important presentation of the income elasticity of demand for various products. Unfortunately, your dog ate most of your notes. All you have written down is three income elasticity numbers: -0.4, +0.4, and +1.4. You don’t know which number goes with which good.

<table>
<thead>
<tr>
<th>Income elasticity #'s</th>
<th>Goes with ???????</th>
<th>Goods</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.4</td>
<td>Rabbit Ridge Super Special Reserve Wine</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>+0.4</td>
<td>Rabbit Ridge House Regular Wine</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>+1.4</td>
<td>Rabbit Ridge Cheap Wine in a Box</td>
<td>10,000</td>
<td></td>
</tr>
</tbody>
</table>

17. What is the Income Elasticity for Rabbit Ridge Super Special Reserve Wine?
   a. -0.4  
   b. +0.4  
   c. +1.4 (most likely to be a luxury)

18. What is the Income Elasticity for Rabbit Ridge Cheap Wine in a Box?
   a. -0.4  
   b. +0.4  
   c. +1.4 (most likely to be an inferior good)

19. Yikes! A recession is hitting the U.S. Household incomes are falling. Which of the following is true of Rabbit Ridge’s sales? Assume Rabbit Ridge does not change the price of any of its wines.
   a. Sales of all wines should stay the same as long as price is not changed.
   b. Sales of all wines will fall. Not enough information is given to determine which wine’s sales will fall by a higher number.
   c. Sales of Cheap Wine in a Box will fall the most. The others will fall by a lesser amount.
   d. Sales of Cheap Wine in a Box will rise. Sales of the others will fall.
   e. Sales of Super Special Reserve Wine will rise. Sales of the others will fall.

20. You’ve just taken an even better job for Acme Inc. Unfortunately, your dog Rex is still eating your presentation notes. All you can read through the doggy drool is: “Cross-Price elasticity of Widgets with respect to Thingymadoos is +1.25. This is known with certainty. Don’t forget to pick up chew toys for Rex.” What can you definitely say regarding Widgets and Thingymadoos?
   a. Both are normal goods.
   b. Sales of both are highly responsive to changes in their own price.
   c. Sales of both are highly responsive to changes in their own price.
   d. They are complements.
   e. None of the above can definitely be said to be true. They’re substitutes

21. True (A) or False (B): It is impossible for any voluntary trade to make a buyer worse off.
   Bad wording. Dropped. But, it is possible for voluntary trade to make buyer worse if there is poor information.
22. **True (A) or False (B):** Voluntary trades always make society as a whole better off. With any voluntary trade, the sum of all the gains and losses to anyone in society is always positive. Voluntary trade cannot make society as a whole worse off. *Info. problems & externalities.*

23. In class we discussed the economics behind parts of Saudi Arabia’s relationship with the west. What was discussed in class regarding Saudi Arabia?

   a. The best interests of the Saudi population as a whole is to raise oil prices. However, the interests of the primary decision makers in Saudi Arabia is to keep oil prices low.
   
   b. The Saudi government, threatened by its neighbors and facing close frequent elections is more concerned about the immediate future than the long-run. Therefore, it produces a lot of oil.
   
   c. The Saudi government is more concerned with the long-run elasticity of demand than many oil producers. Therefore it is more likely to keep prices low.
   
   d. The Saudi government is a producer of oil and therefore looks at producer surplus. It therefore maximizes producer surplus, at the expense or consumer surplus, by producing lots of oil.

24. Assume the market for good X: 1) is perfectly competitive, 2) produces no externalities, and 3) has no information problems. Actions by the government to make firms produce more X than markets will naturally produce will:

   a. definitely increase the net gain to society.
   
   b. definitely decrease the net gain to society.
   
   c. increase the net gain to society only if both demand and supply are inelastic.
   
   d. decrease the net gain to society only if both demand and supply are inelastic.
   
   e. leave the net gain to society unchanged, just redistribute it.

25. Brenda just bought a car from Brent for $2,700. Assume both have perfect information about the car. i.e. They know it’s true condition, etc. Brent gained $2,100 in seller surplus. What is true about the consumer surplus Brenda gained?

   a. It is negative. Brenda was made worse off.
   
   b. She gained $600 in consumer surplus.
   
   c. She gained $2,100 in consumer surplus.
   
   d. She gained consumer surplus. The dollar amount, however cannot be determined from the information given.
   
   e. Based on the information given, it is uncertain whether her consumer surplus was positive or negative.

26. Assume the market for good X: 1) is perfectly competitive, 2) produces no externalities, and 3) has no information problems. Actions by the government to make firms produce less X than markets will naturally produce are:

   a. result in a situation in which the added gain to society of producing one more unit is less than the added cost to society of producing one more unit.
   
   b. result in a situation in which the added gain to society of producing one more unit is equal to the added cost to society of producing one more unit.
   
   c. result in a situation in which the added gain to society of producing one more unit is greater than the added cost to society of producing one more unit.
   
   d. result in a situation that can see society added gain be less than, equal to, or greater than society’s marginal benefit depending on elasticities of supply and demand.
27. Economic romance on the rocks! Greg and Tania, two economists, are arguing. Greg states; “In the absence of externalities and information problems, markets distribute goods efficiently. For any given good, they get the goods to the buyer who value them the most.” Tania replies; “Hold your horses honey. Markets, even if there are no externalities or information problems, do not always get the goods to the consumers who most want them.” Who is correct?

a. Greg only. In the absence of externalities and information problems, markets do get goods to those who truly want them the most.

b. Tanya only. Sellers do not respond to buyers’ wants and needs.

c. Greg is correct if one defines “value” as “$ willingness to pay”. Tania may be right if per capita income (and wealth) are not distributed perfectly equally.

d. Both are incorrect. Both are implicitly modeling consumers as passive takers of sellers’ prices and quantities. In reality, buyers actively “lobby” to change price and quantity.

28. Initially milk in Milkinesia is selling for 27 rupees per liter. Reacting to public pressures, the government imposes a price floor of 20 rupees per liter. What is a likely result of this action.

a. a shortage is created

b. markets go to equilibrium

c. a surplus is created

d. none of the above

29. Uh-oh. During a job interview, your potential boss asks you what you know about the price controls Nixon imposed on various goods (ex. timber) in the early 1970’s. The goal of these price controls was to keep goods affordable for consumers. Unfortunately, being born in the 1980’s, you have no memory of the early 1970’s. Instead you will have to answer based on your understanding of economics. What was the likely result of these price controls?

a. quality of the goods deteriorates

b. price controls are used to protect buyers

c. the government must buy many of these goods from producers and then simply destroy them. Alternatively, the government could pay producers not to produce.

d. all of the above

e. none of the above

30. The government of East Timor recently legislated a price ceiling of 15 rupees per liter on cooking oil. Two weeks have passed and all seems to be worker out as planned. The price of cooking oil has fallen from 20 rupees to 15 rupees. The amount of cooking oil sold has fallen only slightly. Quantity sold fell from 8.4 million liters to 8.0 million liters per week. Which of the following would you expect to see in East Timor 2 years down the road?

a. The amount of cooking oil sold stays near 8.0 million and the quality of cooking oil is unchanged.

b. The amount of cooking oil sold falls further, say to 6.0 million, and the quality of cooking oil falls.

c. The amount of cooking oil sold rises, say to 9.0 million, and the quality of cooking oil falls.

d. The amount of cooking oil sold falls further, 6.0 million, and the quality of cooking oil rises.

e. The amount of cooking oil sold rises, say to 9.0 million, and the quality of cooking oil rises.
31. Assume the government has imposed a price floor, above equilibrium on paper. What will happen if the government buys paper and then tries to re-sell it for whatever it can get?
   a. The resulting shortage can be effectively eliminated.
   b. The resulting shortage will be made even worse.
   c. This will hurt the very group the price floor is designed to help.
   d. both a & c
   e. both b & c

32. Which of the following is not a mechanism for rationing apartments used by landlords owning rent controlled apartments?
   a. raising their posted price above what the market would charge before the price controls
   b. resorting to “black markets”
   c. favoritism
   d. all of the above are used to ration apartments when there is rent control

33. Which of the following is true of Consumer Surplus after the price floor is implemented?
   Dropped. There was an error on the other version.
   a. Consumer surplus will always fall (from what it was before the price floor).
   b. Consumer surplus will always increase.
   c. Consumer surplus can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very inelastic.
   d. Consumer surplus can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very elastic.

34. Which of the following is true of Producer Surplus after the price floor is implemented?
   Dropped. There was an error on the other version.
   a. Producer surplus will always fall (from what it was before the price floor).
   b. Producer surplus will always increase.
   c. Producer surplus can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very inelastic.
   d. Producer surplus can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very elastic.

35. Which of the following is true of Producer Surplus + Consumer Surplus (PS + CS) after the price floor is implemented?
   Dropped. There was an error on the other version.
   a. PS + CS will always fall (from what it was before the price floor).
   b. PS + CS will always increase.
   c. PS + CS can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very inelastic.
   d. PS + CS can rise or fall. It is more likely to fall if the (own price) elasticity of supply is very elastic.
Answer #’s 36 – 39 based on the graphs at right. The graphs are identical copies of each other. i.e. You can use a clean graph for each situation.

36. How much consumer surplus is generated if the market is allowed to go to equilibrium?
   a. $16,000    b. $20,000
   c. $32,000    d. $48,000
   e. none of the above

37. How much producer surplus is generated if the market is allowed to go to equilibrium?
   a. $8,000    b. $10,000
   c. $16,000    d. $24,000
   e. none of the above $4,000

38. How much consumer surplus is generated if a price floor of $12 dollars is imposed?\(^2\)
   a. $4,000    b. $8,000
   c. $16,000    d. $24,000
   e. none of the above

39. How much producer surplus is generated if a price floor of $12 dollars is imposed?\(^3\)
   a. $4,000    b. $8,000
   c. $16,000    d. $24,000
   e. none of the above

\(1,000 + 10,000 = 11,000\)

\(^2\) Assume sellers with the lower marginal cost of production still sell before those with higher costs of production.

\(^3\) Assume sellers with the lower marginal cost of production still sell before those with higher costs of production.
Scratch Paper

Keep this attached to your exam. i.e. Make sure you turn this in with your exam.