

HANDOUT 4 (Midterm Review)

1 Housekeeping

- Any comments feel free to use the anonymous *Feedback Survey* (on my website under *Teaching*).
- No homework due next Monday (5/15).

Reminder

- 5/8 (Monday):
 - Homework Ch4 + Ch5 due at 11:00 am
 - Extra OH at SST 338 from 1:30 pm - 3:00 pm
 - No discussion section
- 5/9 (Tuesday):
 - Morning: Normal OH at SST 338 from 11:00 am to 12:00 pm
 - Afternoon: Midterm Exam 3:30 pm - 4:50 pm (CH1-6), bring Scantron (F-288) + photo ID

2 Exercises

1. Suppose the price of beer is \$2 per serving, and the price of cheese curds is \$9 per serving. At these prices, we observe that the quantity of beer demanded is 50. If the demand elasticity of beer in the price of cheese curds (the cross-price elasticity) is -3, approximately how will the quantity demanded for beer change following a \$2 increase in the price of cheese curds?
 - (a) Demand for beer will decrease by 3 units.
 - (b) Demand for beer will increase by 3 units.
 - (c) Demand for beer will decrease by 15 units.
 - (d) Demand for beer will decrease by 30 units.

2. Jiawei owns a beef house. He uses two ingredients "soy sauce" and/or "balsamic vinegar" to prepare his beef sauce. You have observed that this month, the demand curve for soy sauce has shifted to the right. Which of the following statements could be a plausible explanation for this shift?
 - (a) Soy sauce and balsamic vinegar are complements, and the price of balsamic vinegar has gone up.
 - (b) Soy sauce and balsamic vinegar are substitutes, and the price of balsamic vinegar has gone up.
 - (c) The cross-price elasticity of Soy sauce and balsamic vinegar is negative, and the price of balsamic vinegar has gone up.
 - (d) The cross-price elasticity of Soy sauce and balsamic vinegar is positive, and the price of balsamic vinegar has gone up.

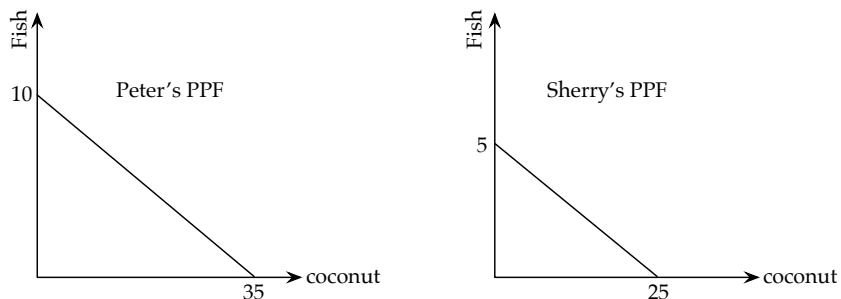
3. If the government removes a tax on a good, then the price paid by buyers will
- (a) increase, and the price received by sellers will increase.
 - (b) increase, and the price received by sellers will decrease.
 - (c) decrease, and the price received by sellers will decrease.
 - (d) decrease, and the price received by sellers will increase.
4. When a tax is placed on the buyers of bottled water, the
- (a) buyers bear the entire burden of the tax.
 - (b) sellers bear the entire burden of the tax.
 - (c) burden of the tax will be shared by the buyers and the sellers, but the division of the burden is not always equal.
 - (d) burden of the tax will always be equally divided between the buyers and the sellers.
5. Consider the market for burgers sold at *Brandywine*. Suppose the cafeteria notices that when they set the price of cheese curds at \$6, they sell 40 units a day. Further, they notice that when the price is \$3, they sell 80 units per day. Assume the demand curve for cheese curds is linear. What is the price elasticity of demand between these two points?
- (a) 0.5
 - (b) 1.3
 - (c) 1
 - (d) 2
6. Continue from the previous question, which of the following is true?
- (a) The revenue maximizing price is above \$6.
 - (b) The revenue maximizing price is below \$3.
 - (c) The revenue maximizing price is between \$3 and \$6.
 - (d) All prices give the same revenue.
7. Which of these outcomes aligns with the implementation of a price ceiling that is above the equilibrium price?
- (a) The price surpasses the earlier equilibrium level.
 - (b) The market price and quantity sold remain unchanged.
 - (c) Supply for the product increases.
 - (d) Demand for the product decreases.

8. Suppose the government imposes a 20-cent tax on the sellers of artificially-sweetened beverages. The tax would shift
- (a) demand, raising both the equilibrium price and quantity in the market for artificially sweetened beverages.
 - (b) demand, lowering the equilibrium price and raising the equilibrium quantity in the market for artificially sweetened beverages.
 - (c) supply, raising the equilibrium price and lowering the equilibrium quantity in the market for artificially sweetened beverages.
 - (d) supply, lowering the equilibrium price and raising the equilibrium quantity in the market for artificially sweetened beverages.
9. Rent control is a government policy that regulates the amount landlords can charge for renting out residential properties. Which of the following is true?
- (a) Rent control is considered by the majority of economists as an effective method to assist the impoverished.
 - (b) It demonstrates how government policies can mitigate or potentially resolve a societal issue.
 - (c) It acts as an instance of a price ceiling.
 - (d) It is the optimal approach to distribute limited housing resources.
10. The rent for a studio apartment at the *Park Place Apartments* and many other alternatives in Irvine is currently averaging \$2520 per month. If the city government plans to establish a price ceiling of \$1500 per month for studio apartments, what impact will this have on the housing market?
- (a) The demand curve will shift to the right.
 - (b) The policy will lead to a shortage of studios in Irvine.
 - (c) The quantity supplied will fall below the equilibrium level.
 - (d) The price ceiling is higher than the equilibrium price.
11. In Brazil and Colombia, both soybeans and coffee beans are produced. It is observed that Brazil imports coffee beans from Colombia while exporting soybeans to Colombia. It can be assumed that the quality of coffee beans and soybeans produced by both countries is the same. Based on this information, which of the following statements is true?
- (a) Colombia has the absolute advantage in the production of coffee beans.
 - (b) Brazil has the absolute advantage in the production of coffee beans.
 - (c) Colombia has a comparative advantage in the production of coffee beans.
 - (d) Brazil has a smaller opportunity cost of producing soybeans than Colombia.

12. Which of the following scenarios is least likely to result in a leftward shift of the supply curve for tomatoes in Florida?
- (a) The publication of a scientific study that links tomato consumption and stomach cancer.
 - (b) An increase in the price of fertilizers required to harvest tomatoes.
 - (c) A hurricane destroys a big percentage of tomato fields.
 - (d) A financial crisis in Florida that forces the majority of tomato harvesters to go bankrupt.
13. Link is capable of preparing both Apple Pies (A) and Meat Skewers (M). If Link only bakes Apple Pies in one day, he can produce a maximum of 20 pies. Additionally, the opportunity cost of making one skewer is equal to 4 pies. What is the equation for Link's production possibilities frontier (PPF)?
- (a) $M = 5 - 4A$
 - (b) $A = 20 - 4M$
 - (c) $A = 20 - \frac{1}{4}M$
 - (d) $M = 4 - \frac{1}{20}A$
14. The price paid by buyers in a market will decrease if the government
- (a) increases a binding price ceiling in that market.
 - (b) increases a binding price floor in that market.
 - (c) increases a tax on the good sold in that market.
 - (d) decreases a tax on the good sold in that market.
15. Consider the following scenario: The price of leather shoes has remained constant over the past month, but the quantity sold has significantly increased. Which of the following sets of circumstances is consistent with this situation?
- (a) The cost of leather has decreased, and the price of tennis shoes (a substitute for leather shoes) has also decreased.
 - (b) The cost of leather has increased, and the price of wool socks (a complement to leather shoes) has also increased.
 - (c) The cost of leather has increased, and the price of tennis shoes (a substitute for leather shoes) has increased.
 - (d) The cost of leather has decreased, and the price of wool socks (a complement to leather shoes) has also decreased.

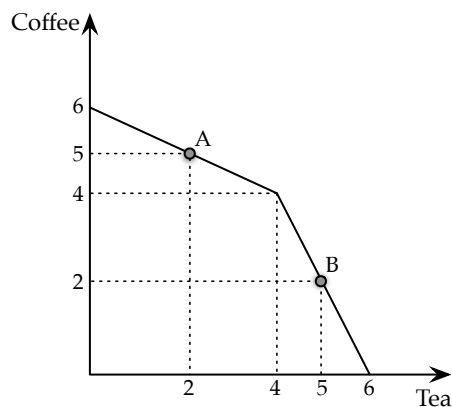
16. A consequence of a binding (effective) price floor is:
- (a) An increase in the quantity demanded and a decrease in the quantity supplied relative to the market equilibrium where there is no intervention in the market.
 - (b) Excess supply of the good.
 - (c) Excess demand of the good.
 - (d) The quantity demanded is less than the equilibrium level.
17. Consider a market that is initially at equilibrium. At this equilibrium, the absolute value of the price elasticity of demand is greater than the absolute value of the price elasticity of supply. If the government imposes an excise tax, which of the following statements is correct?
- (a) The tax revenue is mostly paid by the buyer.
 - (b) The tax revenue is mostly paid by the seller.
 - (c) The buyer and the seller paid the same portion.
 - (d) The portion of the tax revenue allocated to either the buyer or the seller cannot be determined without additional information.
18. Italy and France engage in trade, specializing in the production of wine and cheese. Both countries have equal resources, but Italy produces more wine and cheese than France. Furthermore, Italy produces more wine than cheese. Based on this information, which of the following statements could be inferred?
- (a) Italy must have a comparative advantage in cheese.
 - (b) France must have a comparative advantage in cheese.
 - (c) Italy must have an absolute advantage in both wine and cheese.
 - (d) France must have an absolute advantage in both wine and cheese.
19. Assume that beans are an inferior good, while meat is a normal good. A new wage agreement that raises the income of many consumers has been reached. How will the equilibrium prices and quantities of both goods change in relation to their initial levels?
- (a) The equilibrium price and the equilibrium quantity of both goods will increase.
 - (b) The equilibrium price and the equilibrium quantity of beans will decrease; the equilibrium price and the equilibrium quantity of meat will increase.
 - (c) The equilibrium price and the equilibrium quantity of beans will increase, and the equilibrium price and the equilibrium quantity of meat will decrease.
 - (d) The equilibrium price and the equilibrium quantity of both goods will decrease.

20. Peter and Sherry are on vacation in Maui and can choose between collecting coconuts or going fishing. The production possibilities frontiers (PPFs) for their options are shown below. Which of the following statements is correct?



- (a) Peter has an absolute advantage in both activities and a comparative advantage in both activities.
- (b) Peter has an absolute advantage in both activities and Sherry has a comparative advantage in fishing.
- (c) Peter has an absolute advantage in both activities and Sherry has a comparative advantage in Coconut collecting.
- (d) Peter has a comparative advantage in coconut collecting and Sherry has a comparative advantage in fishing.
21. Out of the following scenarios, which one will result in the equilibrium price of wine changing in a direction that differs from the other three scenarios?
- (a) The price of grapes (input into the production of wine) increases.
- (b) New research comes out claiming wine reduces the risk of cancer.
- (c) Income falls, and wine is a normal good.
- (d) The price of beer (a substitute for wine) increases.
22. Suppose there is currently a tax of \$100 per ticket on airline tickets. Sellers of airline tickets are required to pay the tax to the government. If the tax is reduced from \$100 per ticket to \$80 per ticket, then the
- (a) demand curve will shift upward by \$20, and the price paid by buyers will decrease by \$20.
- (b) demand curve will shift upward by \$20, and the price paid by buyers will decrease by less than \$20.
- (c) supply curve will shift downward by \$20, and the effective price received by sellers will increase by less than \$20.
- (d) supply curve will shift downward by \$20, and the effective price received by sellers will increase by \$20.

23. The PPF for the Café consists of two linear segments as provided in the graph below:



What is the opportunity cost of tea going from A to B?

- (a) 3 cups of tea
 - (b) 3 cups of coffee
 - (c) 1 cup of coffee
 - (d) 6 cups of coffee
24. Following the previous question, which one of the following points (Tea, Coffee) is feasible but inefficient?
- (a) (6, 0)
 - (b) (5, 5)
 - (c) (4, 4)
 - (d) (3, 3)
25. Following the previous question, consider the two points A and B in the above graph, which of the following statements is correct?
- (a) The opportunity cost of an additional unit of coffee at A is lower than the opportunity cost of an additional unit of coffee at B.
 - (b) The opportunity cost of an additional unit of coffee at A is 0.5 cups of tea.
 - (c) The opportunity cost of an additional unit of coffee at A is higher than the opportunity cost of an additional unit of coffee at B.
 - (d) The opportunity cost of an additional unit of coffee at B is 1 cup of tea.