- This exam contains 8 pages (including this cover page) and 14 questions. Check to see if any pages are missing.

- The exam is scheduled for 1 hour.

- This is a closed-book, closed-note exam, no calculator exam.

- Enter all requested information on the top of **each** page. **Do not detach the pages.**

- All questions must be answered in the space provided in this question paper booklet.

- Do not remove any pages or add any pages. No additional paper is supplied

- The blank backs of pages may be used for rough work

- Show your work when applicable.

- You must use a pen instead of a pencil to be eligible for remarking

1. (3 points) It's 6pm and I want to get something for dinner. I have a coupon that takes $5 off on any order at Sweetgreen Salad. I will use the coupon for sure if I buy a salad there. The coupon expires at midnight. I am considering getting a salad there at a regular price of $9 that I value at $20. Now a friend calls and tells me there's free pizza at Houston Hall. What is my opportunity cost of giving up salad and get the free pizza for dinner?

    A. $5
    B. $11
    C. $16
    D. $25

2. (3 points) The demand for wheat bread is likely to be:

    A. More elastic than the demand for bread in general.
    B. More inelastic than the demand for bread in general.
    C. Less elastic than the demand for bread in general.
    D. Just as elastic as the demand for bread in general.

3. (3 points) Bradley and Sara are stuck on a desert island and can only produce food and clothing. Their only resources are their time and effort. Suppose that Bradley and Sara's joint PPF has one kink. Which of these following statements must be true?

    i Bradley has the comparative advantage in the production of clothing
    ii Bradley and Sara have different opportunity costs of producing food
    iii There exists an exchange rate where Bradley and Sara would find it beneficial to trade

    A. Only i
    B. Only ii
    C. i and ii
    D. ii and iii
    E. i, ii and iii

4. (3 points) If sweaters are a normal good, we can say for certain that:

    A. The income elasticity for sweaters is greater than 1.
    B. The income elasticity for sweaters is less than 1.
    C. The income elasticity for sweaters is less than -1.
    D. None of the above.

5. (3 points) The market for light bulbs is initially in equilibrium with a downward-sloping demand line and an upward-sloping supply line. The government expects the price to decrease, so they decide to impose a price floor to prevent the price from going to low. Which of the following is a possible consequence of the price floor?

    i The price increases
    ii The quantity demanded decreases
    iii The price and quantity remain the same

    A. Only i
    B. Only ii.
    C. Only iii.
    D. i. and ii.
    E. i. ii. and iii.

6. (3 points) A point inside the PPF indicates:

    A. A reduction in resources available

    B. Resources are not fully used

    C. There is inflation

    D. It's the best way of production.

7. (3 points) The two figures below show demands for apples (left) and oranges (right). Denote the price elasticity of demand for apples between points A and B as e_1, and that for oranges between points C and D as e_2. Which of the following statements is correct?

    A. $e_1 > e_2$ because the difference in quantities between A and B is larger than between C and D.

    B. $e_1 < e_2$ because the demand of apples is much flatter than oranges.

    C. $e_1 = e_2$ because both demands are straight lines.

    D. Can't really tell without specific numbers for prices and quantities demanded.

Figure 1: Demands for apples (left) and oranges (right)

8. (3 points) Which of the following could cause an increase in the price of Apple Juice?

    A. A rise in the price of Orange Juice, a substitute for Apple Juice.

    B. An increase in incomes, if Apple Juice is an inferior good.

    C. A poor apple harvest due to an early frost.

    D. Both A and C.

    E. All of the above

9. (3 points) When supply for a good decreases, consumers respond by

    A. decreasing their demand.

    B. increasing their preferences for the good.

    C. decreasing their quantity demanded.

    D. increasing their quantity demanded.

    E. purchasing more complementary goods.

10. (3 points) If the price elasticity of demand for tuna is 0.7, then a 1.5% increase in the price of tuna will decrease the quantity demanded of tuna by

    A. 1.05%, and tuna sellers' total revenue will increase as a result.

    B. 1.05%, and tuna sellers' total revenue will decrease as a result.

    C. 2.14%, and tuna sellers' total revenue will increase as a result.

    D. 2.14%, and tuna sellers' total revenue will decrease as a result.

11. (3 points) Raisin bran and milk are complementary goods. A decrease in the price of raisins will

    A. increase consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.

    B. increase consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.

    C. decrease consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.

    D. decrease consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.

12. (3 points) President Obama is pushing to reduce an already-existing government subsidy for food granted to low-income individuals and families, which is being partly used to buy unhealthy foods such as soda. He says that such a change will have the following effects:

   i Make soda less affordable.

   ii Encourage less people to buy soda.

   iii Increase the well-being of society as a whole.

Using our model of supply and demand, which claims do you agree with?

    A. Only i

    B. Only ii

    C. Only iii

    D. Only i and ii

    E. All three claims are correct using our model.

13. In South America, countries divide their production between raw materials and manufactured goods for their industries. Two of them, Brazil and Chile, produce both copper and automobile parts. The table below presents how many of those goods each country produces in a month.

	Copper (thousand tons)	Auto Parts (thousand units)
Brazil	40	30
Chile	60	20

(a) (8 points) Graph the PPF of each country. Put auto parts in the horizontal axis.

(b) (8 points) Complete the following table with each good's opportunity costs for each country:

|	Copper	Auto Parts
Brazil		
Chile		

(c) (8 points) Which country has a comparative advantage in copper production? Which country has a comparative advantage in auto parts production?

(d) (4 points) Find an exchange rate for automobile parts that would benefit both countries if they decide to trade.

(e) (8 points) Graph the CPF for each country using the exchange rate you found above. Start by graphing the PPF for each country again and then graph the CPF. Show your calculations.

14. In the town of Pauperism, the market for bread is characterized by the following demand $Q^d = 11 - P$ and supply $Q^s = -4 + 2P$.

(a) (1 point) Draw Supply and Demand on the following graph. Label them and specify their intercepts.

P
|
|
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|
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0 |_____→ Q
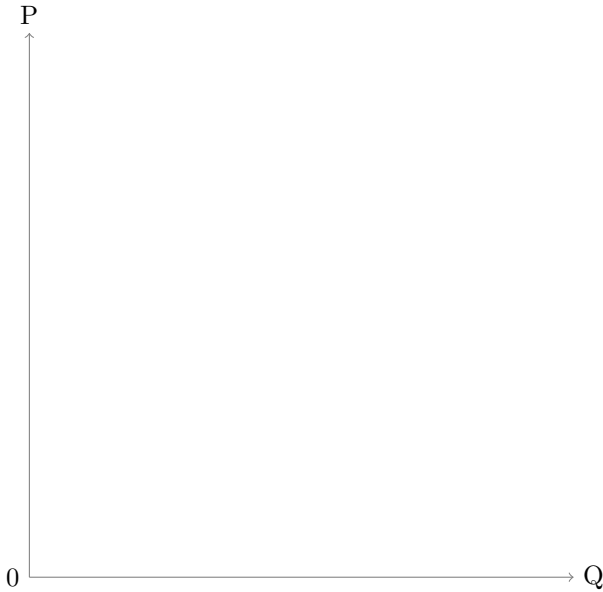
(b) (6 points) Find numerically the equilibrium price and quantity and show them on the graph.

(c) (6 points) Calculate Consumer Surplus (CS), Producer Surplus (PS) and Total Surplus (TS) in equilibrium

(d) (6 points) "The price of bread is killing us!" claim the citizen of Pauperism. The government is concerned with the discontent and wishes to make bread more affordable. It thus places a price ceiling of $P = 2$. Draw the price ceiling on the graph. What is the new equilibrium quantity?

(e) (6 points) An economic adviser suggests that this price is too low for producers and proposes a price ceiling of $P = 3$. What is the new equilibrium quantity? How much is the excess demand?

(f) (4 points) What is the deadweight loss associated with this new price ceiling ($P = 3$)?