

Econ 251
Spring 2016
Exam 1 Pink

Susan has only 3 options for dinner: pizza, Subway or pasta. Going out for pizza is worth \$10 to her; getting Subway is worth \$8; and pasta is worth \$12 to her. The purchase price of each dinner option is \$8.

1. What is Susan's opportunity cost of having pasta for dinner?
 - a. \$10, the value of pizza
 - b. \$8, the value of Subway
 - c. \$18, the value of pizza plus the price of pizza
 - d. \$20, the value of pasta plus the price of pasta
2. What is the \$8 that Susan has to pay for dinner known as?
 - a. Opportunity cost
 - b. Total cost
 - c. Sunk cost
 - d. Implicit cost
3. Which of the following is NOT counted as a natural resource?
 - a. Oil
 - b. Diamonds
 - c. A field
 - d. A computer

Answer the following questions using the production possibilities schedule firms in the candy industry, which produces chocolate and gummy snacks. Use this table to answer the following 3 questions.

Production Possibilities

| Chocolate | Gummy Snacks |
|-----------|--------------|
| 0 | 18 |
| 2 | 17 |
| 4 | 15 |
| 6 | 12 |
| 8 | 6 |

4. What's the marginal cost of the 2nd unit of chocolate?
 - a. 0.5 gummy snacks
 - b. 1 gummy snack
 - c. 6 gummy snacks
 - d. 12 gummy snacks

5. As production of chocolate increases, what happens to the marginal cost of producing chocolate?
 - a. It remains constant
 - b. It increases
 - c. It decreases
 - d. The change in the marginal cost of producing chocolate falls at first but then rises.
6. If the quantity of chocolate produced is measured on the x axis, what is the slope of the production possibility frontier as production of chocolate increases from 6 to 8?
 - a. -6
 - b. -3
 - c. -2
 - d. 2
7. Why is the slope of a production possibilities frontier (PPF) always negative?
 - a. Marginal costs are typically negative
 - b. Most goods that are produced are complements in production
 - c. Resources are scarce
 - d. All of the above

Use the following information to answer the following 4 questions. Nic and Mike produce pies and cookies. Nic can produce 13 pies or 14 cookies in an hour. Mike can produce 15 pies or 16 cookies in an hour.

8. Mike has an absolute advantage in
 - a. Making pies only
 - b. Making cookies only
 - c. Both making pies and cookies
 - d. None of the above
9. Mike's opportunity cost of making one cookie is
 - a. $15/16$ of a pie
 - b. $16/15$ of a pie
 - c. $15/16$ of a cookie
 - d. $1/2$ of a pie
10. Nic has a comparative advantage in
 - a. Making pies only
 - b. Making cookies only
 - c. Both making cookies and pies
 - d. None of the above

11. Which of the following points does NOT satisfy production efficiency if Nic and Mike work together?
- a. 14 cookies and 15 pies
 - b. 16 cookies and 13 pies
 - c. 0 cookies and 28 pies
 - d. 30 cookies and 0 pies
12. Consider a market for leather jackets. Which of the following does NOT result in a shift of the supply curve for leather jackets?
- a. A change in the number of sellers of leather jackets
 - b. A change in the demand for leather jackets
 - c. A change in the production technology used to produce leather jackets
 - d. A change in the price of leather wallets, which are substitutes in production
13. In the market for Hershey bars, there is an increase in consumer income. How does this change affect demand or supply if Hershey bars are normal goods?
- a. The demand for Hershey's chocolate bars increases.
 - b. The demand for Hershey's chocolate bars decreases.
 - c. The supply of Hershey's chocolate bars increases.
 - d. The supply of Hershey's chocolate bars decreases.
14. Which of the following is used to measure marginal cost of production in a market?
- a. The y coordinate of the demand curve
 - b. The x coordinate of the supply curve
 - c. The x coordinate of the demand curve
 - d. The y coordinate of the supply curve
15. If yoga class and Pilates classes are substitutes in production, what does this imply?
- a. The resources used to provide yoga classes can also be used to provide Pilates classes.
 - b. An increase in the price of yoga classes will increase the supply of Pilates classes.
 - c. Consumers view yoga classes and Pilates classes as equally valuable.
 - d. A change in the price of yoga classes will change the demand for Pilates classes.
16. If paper clips and binder clips are substitutes in consumption, how will an increase in the price of paper clips affect equilibrium in the market for binder clips?
- a. Equilibrium price and quantity both fall.
 - b. Equilibrium price falls but equilibrium quantity rises.
 - c. Equilibrium price rises but equilibrium quantity falls.
 - d. Equilibrium price and quantity both rise.

17. Paper clips and binder clips are substitutes in consumption, but paper clips and binder clips are also substitutes in production. Based on this information, how will an increase in the price of paper clips affect equilibrium in the market for binder clips?
- Equilibrium price rises and equilibrium quantity falls.
 - Equilibrium price falls and equilibrium quantity rises.
 - Equilibrium price rises and equilibrium quantity is indeterminate.
 - Equilibrium price falls and equilibrium quantity is indeterminate.
18. Gas prices have been falling lately. Which of the following could explain that change in price?
- The demand for gas has been rising
 - The supply of gas has been rising
 - The cost of refining oil into gas has been rising
 - The price of the substitutes in consumption, like soy biodiesel and ethanol, have been rising
19. Consider a market for plastic chairs. The price of a plastic chair increases from \$12 to \$14 which results in a decrease in quantity demanded from 300 to 200. What is the price elasticity of demand for a chair?
- $13/5 = 2.6$
 - $5/2 = 2.5$
 - 50
 - $50/7 = 7.14$
20. Given the information in the problem above, the increase in the price of chairs results in a(n) _____ in revenue, implying that demand for plastic chairs is _____ in that range.
- Decrease; inelastic
 - Increase; elastic
 - Decrease; elastic
 - Increase; inelastic
21. Which of the following is NOT a factor that influences the price elasticity of demand?
- The availability of substitutes in consumption.
 - The proportion of income consumers spend on the good.
 - The availability of substitute inputs used to produce the good.
 - The time available to respond to the price change
22. When the price of shirts rises by 10%, the quantity of buttons demanded falls by 5%. The cross-price elasticity of demand between these two goods is equal to _____, implying that shirts and buttons are _____.
- 2; substitutes in consumption
 - $1/2 = 0.5$; complements in consumption
 - 2; substitutes in consumption
 - $-1/2 = -0.5$; complements in consumption

23. When supply of a good is perfectly elastic, which of the following is true?
- Supply curve is horizontal
 - The slope of supply is 0
 - Supply has a price elasticity of infinity
 - All of the above
24. When a market reaches allocative efficiency, which of the following is NOT necessarily true?
- Marginal benefit equals marginal cost
 - Total surplus is maximized
 - Revenue is maximized
 - Resources are being used where they are most highly valued
25. If a price floor causes a surplus, the price floor must have been set
- Below the equilibrium price
 - Above the equilibrium price
 - At the equilibrium price
 - At the efficient level of output

The table below provides demand and supply schedules in the market for wool blankets. Use this information for the following 5 questions.

| Price (\$) | Quantity demanded | Quantity supplied |
|------------|-------------------|-------------------|
| 5 | 25 | 5 |
| 7 | 20 | 10 |
| 9 | 15 | 15 |
| 11 | 10 | 20 |
| 13 | 5 | 25 |
| 15 | 0 | 30 |

26. What is the marginal benefit of the 10th wool blanket?
- \$4
 - \$5
 - \$7
 - \$11
27. What is consumer surplus on the 10th wool blanket when the price is the equilibrium price?
- \$2
 - \$3
 - \$9
 - \$11

28. What level of wool blanket production satisfies allocative efficiency?
- 10
 - 15
 - 20
 - 30
29. If a price ceiling of \$5 is set in the market for wool blankets, which of the following would you expect to see as a result?
- A surplus of 10 blankets
 - A shortage of 10 blankets
 - A surplus of 20 blankets
 - A shortage of 20 blankets
30. What is the marginal benefit of the last wool blanket supplied at the price ceiling of \$5?
- \$5
 - \$9
 - \$13
 - \$15
31. In general, deadweight loss resulting from a price ceiling set below the equilibrium price is deadweight loss from
- Overproduction
 - Underproduction
 - Overefficiency
 - None of the above

Use the following information to answer the following 6 questions. Consider the market for pairs of jeans with demand and supply curve as shown below:

$$Q_d = 240 - 2P$$
$$Q_s = P - 30$$

32. What is the marginal cost of producing the 3rd pair of jeans?
- \$30
 - \$27
 - \$34
 - \$33
33. At what point is demand unit elastic in the market for jeans?
- (60, \$90)
 - (120, \$60)
 - (180, \$30)
 - (140, \$50)

34. What is total surplus when the market reaches equilibrium?
- a. \$60
 - b. \$90
 - c. \$2700
 - d. \$5400
35. If a \$15 excise tax is imposed in the market for jeans, what price will consumers pay after the tax?
- a. \$95
 - b. \$100
 - c. \$105
 - d. \$115
36. What is the deadweight loss when an excise tax of \$15 is imposed?
- a. \$25
 - b. \$75
 - c. \$80
 - d. \$150
37. What tax revenue will the government collect from imposing the \$15 excise tax?
- a. \$500
 - b. \$600
 - c. \$750
 - d. \$900
38. In general, how are deadweight loss, tax revenue, and the loss in total surplus related when an excise tax is imposed in a market?
- a. Deadweight loss is equal to the loss in total surplus plus tax revenue.
 - b. Tax revenue is equal to the total surplus after the tax plus deadweight loss.
 - c. The loss in total surplus is equal to deadweight loss plus tax revenue.
 - d. Deadweight loss is equal to tax revenue minus the loss in total surplus.
39. Who bears more of the burden of a tax imposed in a market?
- a. Consumers always bear more of the burden of a tax
 - b. The burden of a tax is always shared equally between consumers and producers
 - c. Whoever is less elastic bears more of the burden of a tax
 - d. Whoever is more elastic bears more of the burden of a tax
40. In general, when a tax is imposed in a market, which of the following would you expect to see as a result?
- a. An increase in the price sellers receive after the tax
 - b. A decrease in the price consumers pay after the tax
 - c. A decrease in the quantity traded after the tax
 - d. All of the above