NAME _____

Peking University

Principles of Economics

Spring 2024

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Homework 1

Due: Wednesday, March 27

Instructions:

1. Print your name on the answer sheet.
2. This homework assignment consists of 20 multiple-choice questions with each one worth 3 points and 2 short-answer questions for 40 points, 100 points total. Make sure you have a complete question set.
3. Please write down all your answers on the answer sheet. Answers written on the question sheet will NOT be graded.
4. The space provided on the answer sheet should be sufficient for your answer. If you need additional space, attach a blank paper.
5. Please write neatly. If I cannot read an answer, you will receive no credit for it.
6. Show enough of your work so that I can tell how you arrived at the answer. You will receive credit for sound reasoning. Partial credit will be awarded wherever I deem there is sufficient justification.
7. When drawing graphs, make sure to label everything, including the axes. It is not particularly important to draw your graphs with perfect precision.
8. Turn in the answer sheet ONLY.

1. **Because of scarcity,**

A. **we can use more resources for one purpose without sacrificing the amount used for other purposes.**
B. **we must sacrifice something of value to obtain more of any good or service we desire.**
C. **the opportunity cost of any good or service will always be zero.**
D. **we can obtain more of any good or service we desire without sacrificing something of value.**

2. **If you choose to play tennis on Monday morning and the best alternative for the use of your morning is studying, then**

A. **the opportunity cost of playing tennis is zero.**
B. **studying that morning is the benefit of playing tennis.**
C. **the opportunity cost of playing tennis is the morning of sacrificed study time.**
D. **you do not have enough information to determine the opportunity cost of playing tennis in the morning.**

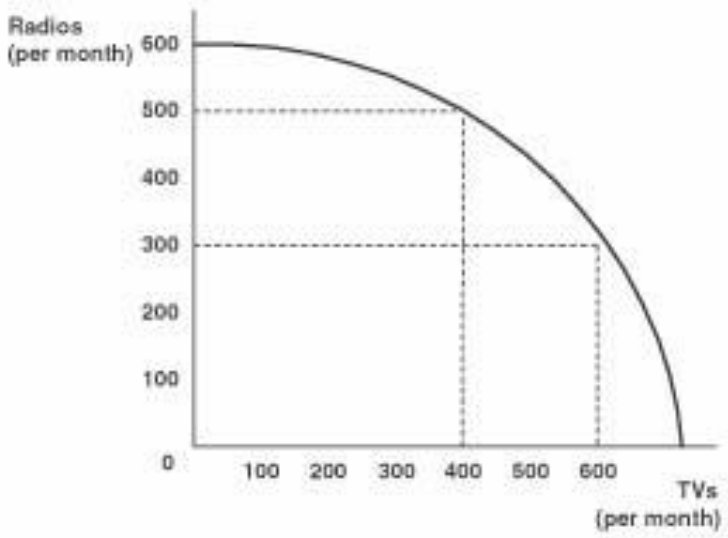
3. **Alan is sitting in a bar drinking beers that cost $5 each. According to marginal analysis, Alan will quit drinking beers when**

A. **his marginal benefit of an additional beer is less than $5.**
B. **his marginal cost of an additional beer is less than the marginal benefit.**
C. **his marginal cost of an additional beer is greater than $5.**
D. **his marginal benefit of an additional beer is zero.**

4. **If all productive resources are fully and efficiently employed in a nation and technology is fixed this year, then**

A. **it is impossible to increase the production of medical services this year.**
B. **it is possible to increase national production of medical services without decreasing the production of other goods or services this year.**
C. **the production of medical services cannot be increased or decreased during the year.**
D. **it is possible to increase the production of medical services, but only by decreasing the production of other goods and services this year.**

5. Refer to the figure.



The graph above shows the production possibilities frontier for a manufacturing facility that produces both radios and televisions. Suppose the firm is currently producing 500 radios and 400 TVs per month, but decides to increase the production of TVs to 600 next month. Based on the facility's production possibilities frontier,

A. it is impossible for the firm to produce 600 TVs per month.
B. the opportunity cost of increasing TV production from 400 to 600 units next month is 200 radios.
C. the opportunity cost of increasing TV production by one unit is always 2 radios, no matter what is the production level of TVs.
D. the opportunity cost of increasing TV production from 400 to 600 units next month is 500 radios.
E. it is possible for the firm to produce 600 TVs next month without reducing the number of radios produced.

6. Daniel has an income of \$240 and the price of cake (P_c) and donuts (P_d) are both \$3. What is Daniel's budget line?

A. $240 = 3P_c + 3P_d$
B. $240 = 3Q_c + 3Q_d$
C. $240 = \frac{3P_c}{3P_d}$
D. $240 = \frac{3Q_c}{3Q_d}$
E. None of the above.

7. Suppose that you have monthly income of $100 that you spend entirely on mystery novels and candy bars. The price of a mystery novel is $5 and the price of a candy bar is $1. What is the opportunity cost of buying each additional mystery novel?

A. $\frac{1}{5}$ candy bars.
B. 1 candy bar.
C. 5 candy bars.
D. 20 candy bars.
E. 100 candy bars.

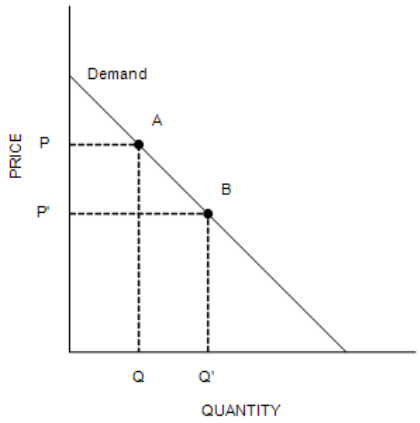
8. A likely example of substitute goods for most people would be

A. tennis balls and tennis rackets.
B. televisions and subscriptions to cable television services.
C. coffee and sugar.
D. iced tea and lemonade.

9. If pasta is an inferior good, then the demand curve shifts to the _____ when _____ rises.

A. right; the price of pasta
B. right; consumers' income
C. left; the price of pasta
D. left; consumers' income

10. Refer to the figure.



The movement from Point A to Point B on the graph is caused by

A. a decrease in price.
B. a decrease in the price of a substitute good.
C. an increase in price.
D. an increase in the price of a substitute good.
E. an increase in income.

11. A baker recently has come to expect higher prices for bread in the near future, then

A. the baker would supply more bread now than she was supplying previously.
B. the baker would supply less bread now than she was supplying previously.
C. there is no change in the baker's current supply of bread; instead, future supply will be affected.
D. the demand for bread would fall.

12. If a surplus exists in a market, then the actual price is

A. above the equilibrium price, and quantity supplied is greater than quantity demanded.
B. above the equilibrium price, and quantity demanded is greater than quantity supplied.
C. below the equilibrium price, and quantity demanded is greater than quantity supplied.
D. below the equilibrium price, and quantity supplied is greater than quantity demanded.

13. Suppose the market equilibrium price of lumber increases while, at the same time, the market equilibrium quantity sold declines. Which of the following is the most likely explanation for the change in the market equilibrium price and quantity?

A. A decrease in the demand for lumber combined with an increase in the supply of lumber.
B. An increase in the demand for lumber combined with an increase in the supply of lumber.
C. A decrease in the supply of lumber.
D. An increase in the demand for lumber.

14. The demand for single-family homes decreases because of a decline in the number of new buyers. At the same time, the supply of homes decreases because of a decrease in the number of firms in the home-building industry. As a result of these two changes in the market,

A. the price of homes will decrease and the quantity sold will increase.
B. the price of homes will increase and the quantity sold will decrease.
C. the quantity of homes sold will decrease, but the effect on the price of homes cannot be predicted.
D. the price of homes will increase, but the effect on quantity sold cannot be predicted.

15. The current minimum wage is $7.25 per hour. This minimum wage will cause unemployment if

A. the market equilibrium wage is $10 per hour.
B. the market equilibrium wage is $8 per hour.
C. the market equilibrium wage is $7.25 per hour.
D. the market equilibrium wage is $6 per hour.

16. A price floor of $5.22 per bushel is established for corn, and the government agrees to purchase all the corn that can't be sold in the marketplace at that price. As a result of the price floor, the quantity of corn demanded by buyers is 1.30 million bushels per year, while the quantity supplied by farmers is 2.87 million bushels per year. It follows that

A. the government will have to spend $8.20 million to purchase surplus corn.
B. there will be a shortage of 1.57 million bushels of corn.
C. the price of corn for consumers will be lower than it would have been if there were no price floor.
D. the price floor of $5.22 is less than the market equilibrium price.

17. The price elasticity of demand for Phantom of the Opera tickets is −2.39 in Boise. If the price of this ticket increases by 5.22%, the quantity of tickets demanded will

A. decrease by 12.48%.
B. decrease by 45.79%.
C. increase by 2.39%.
D. increase by 5.22%.
E. decrease by 2.18%.

18. If the price elasticity of demand for *The Wall Street Journal* is $-\frac{1}{3}$, then the demand is

A. unit-elastic.
B. perfectly elastic.
C. inelastic.
D. perfectly inelastic.
E. elastic.

19. A consultant for the CAT bus system in Raleigh, North Carolina, estimates that the price elasticity of demand for bus rides is −3.41. If the estimate is correct, it follows that, if bus fare is increased,

A. total revenue will increase.
B. total revenue will decrease.
C. there will be no effect on bus ridership.
D. bus ridership will increase.

20. If the supply of land in Wake County is perfectly inelastic, an increase in the demand for Wake County land will

A. increase land prices, but have no effect on the quantity of land supplied.
B. increase the quantity of land supplied, but have no effect on land prices.
C. decrease land prices.
D. increase both land prices and the quantity of land supplied.

21. **During course enrollment, Thompson persuades Johnson to take Principles of Economics reasoning that "Even if you are not interested in it, the only cost is a possible W on your transcript." However, is the opportunity cost truly as Thompson had claimed? If not, what is the opportunity cost of taking this course?**

22. The movie Suzume was premiered at the PKU HALL on March 17, 2023. Given the seats capacity, tickets were sold out immediately while lots of students were still waiting in line. In this ticket market, suppose the premiere host is the supplier and the students are consumers. Assume the seat capacity at the PKU HALL is 2,000 and the host fixed the ticket price at ¥20.

1) **Graph the demand and supply curves for the market. Label all the related prices and quantities described above.**
2) **Thanks to the breathtaking popularity of the movie, some "ticket scalpers" appeared at the PKU Treehole. They bought tickets from the host and resold to fans at a higher price to acquire a large profit. Assume that the ticket scalpers buy out all the tickets and resell them at ¥1,000. Mark the area that represents the profit of the ticket scalpers in the figure.**