

Midterm 2

Closed book exam. No cell phones, calculators, or other electronic aids allowed.

Instructions: Answer these multiple choice questions on your Scantron. Write on the Scantron your name (last name first) and student ID number, section #, and TA name.

YOUR NAME _____

1. Which of the following is NOT a formula for the **price elasticity of demand**

- A. $\frac{(\Delta Q/Q)}{(\Delta P/P)}$
% change in quantity
% change in price
- B. $\frac{\% \text{ change in price}}{\% \text{ change in quantity}}$
- C. $\frac{(\Delta Q/\Delta P)}{(Q/P)}$
- D. $\frac{\Delta Q \cdot P}{\Delta P \cdot Q}$
- E. $\frac{\Delta Q \cdot P}{\Delta P \cdot Q}$

2. Suppose that in a competitive market the demand for taxi rides can be written as $Q_d = 20 - P$ and the supply can be written as $P = Q_s + 4$. What is the market equilibrium price?

- A. \$20
- B. \$16
- C. \$12
- D. \$10
- E. \$8

3. In question 2 what is the marginal cost of production when output is 5?

- A. \$5
- B. \$9
- C. \$12
- D. \$15
- E. \$18

4. In question 2 what is the total surplus in this market?

- A. \$16
- B. \$32
- C. \$64
- D. \$96
- E. \$128

5. On street parking is typically underpriced in cities, resulting in all spaces being taken, drivers wasting time looking for spaces, and so creating more congestion. Shop owners argue that raising prices to market clearing levels would lead to fewer customers.

- A. This is correct, and would be a cost for such a policy.
- B. This is only correct if drivers have different income levels.
- C. This is only correct at peak shopping times.
- D. This is incorrect. The numbers of customers would not change.
- E. This is correct, but the shop owners could be compensated by the increased parking revenues.

6. Nicotine is highly addictive. Yet the price elasticity of demand for cigarettes is estimated to be as high as -0.7 for some consumers. This implies that if the government were to double prices of cigarettes through taxes it would reduce consumption by

- A. 0.7%
- B. 7%
- C. 14%
- D. 70%
- E. 140%

7. What explains why addictive products like cigarettes can have such high price elasticities?

- A. Nicotine is not really addictive
- B. Cigarettes are inferior goods
- C. Cigarettes are luxuries
- D. Cigarettes are necessities
- E. For smokers, cigarettes become a significant share of their total expenditure

8. As many as 15,000 kidneys are illegally sold globally each year. The World Health Organization estimates that only 10 percent of global needs for organ transplantation are being met. Why would many economists favor making such organ trade legal?

- A. It would increase the supply of organs for transplant.
- B. It would ensure organs go to those who need them most.
- C. Both buyers and sellers would benefit from such transactions, so the free market would be efficient.
- D. Poor people don't have as much need for their organs as rich people.
- E. The world income distribution is optimal, so a \$ in a poor country is as valuable as a \$ in a rich country.

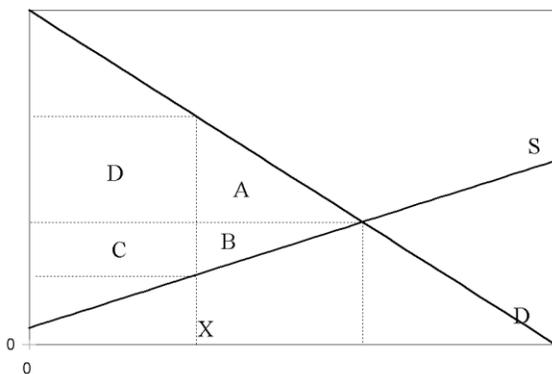
9. Free trade reduces the wages of unskilled US workers, and increases the returns to owners of capital and to skilled professionals. But since the real value of a \$ of income to a poor person is much greater than to a rich person, how can we be sure free trade is not doing more harm than good?

- A. This will give an incentive to unskilled workers to upgrade their skills.
- B. The \$ gains to capital owners and skilled workers are greater than the \$ losses to the unskilled.
- C. Unskilled workers do not vote as much as richer people, so we do not have to count their interests as much
- D. We can only assume this if we regard income distribution in the US as optimal, so the value of a \$ to a poor person is the same as that to a rich person.
- E. Free trade is benefiting the unskilled in countries like China, so we should count in their gains as well.

10. Suppose a donor to UC-Davis wants to give away \$100,000 per year to help students. What is the most **efficient** way to do this?

- A. Give \$1,000 each to the first 100 students who shows up at Mrak Hall at 9 am on January 1, as long as their income is below \$20,000 per year.
- B. Have an essay writing competition where students would make a case for why they need the money, with \$1000 to each of the 100 best essays.
- C. Give \$10 each to the first 10,000 students who shows up at Mrak Hall at 9 am on January 1.
- D. Give \$1,000 each to the first 100 students who shows up at Mrak Hall at 9 am on January 1.
- E. Give \$10,000 to 10 students chosen at random from registered students.

11. The diagram below shows the demand for peanuts in the USA, and the supply. The market is competitive. Suppose the government fixes a quota of output at point X. The quota is tradable between those initially allocated it. The loss to society in \$ is represented by which areas?



- A. A+D
- B. A+B
- C. A+B+C+D

- D. B+C
- E. C+D

12. If all highways in California were made into toll roads with prices set to eliminate congestion it could raise as much as \$10 billion in revenue for the state each year. What would the real burden of these charges on drivers (approximately)?

- A. \$0 billion
- B. Less than \$5 billion
- C. \$5 billion
- D. More than \$5 billion
- E. \$10 billion

13. Hurricane Sandy sharply reduced gasoline supplies in New York and New Jersey. The governor of New Jersey threatened to prosecute gas station operators who raise gasoline prices. This government action to suppress a price rise is economically highly costly because

- A. It creates rent seeking behavior in the form of lines of cars waiting 3 or more hours for gas, and drivers circling the cities looking for gas stations with gas.
- B. It increases the demand for gasoline.
- C. It reduces the incentives of the private sector to increase gasoline supplies.
- D. It causes both A and C
- E. It causes all of A, B and C.

14. Suppose that the typical cost of a bottle of wine to restaurants (including the labor of serving it) is \$8. Suppose also that restaurants typically sell wine to diners for \$30 per bottle. **This shows that:**

- A. Restaurant pricing is inefficient.
- B. Wine is a luxury good.
- C. The restaurant business is very profitable.
- D. Wine drinkers are rent seekers.
- E. There is a price floor on wine sales.

15. A bottle of wine costs a restaurant \$8 to serve, but the diner pays \$30. But ratatouille, a vegetable stew, costs \$10 a plate to prepare and serve, but the diner pays only \$15. This difference in profit margins is explained by

- A. Wine drinkers have a high income elasticity of demand for wine
- B. Wine drinkers tend to have lower price elasticity of demand than vegetable eaters
- C. Richer people are those who order wine
- D. Restaurants try to discourage excessive wine consumption
- E. Vegetable eaters tend to have low price elasticities of demand

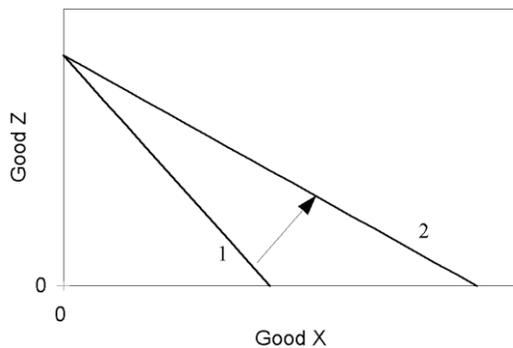
16. Which of the following statements is **POSITIVE (DESCRIPTIVE)**?

- A. There is more inequality in wages in 2012 than there was in 1970 in the USA.
- B. Some inequality in wages is desirable for incentive reasons.
- C. Unions do not have enough influence in the Obama administration.
- D. A free labor market is a good thing for the economy.
- E. It is bad that a free labor market results in low wages in the USA for unskilled labor.

17. Eric demands more peanuts as his income increases. From this statement, we can conclude-

- A. Peanuts are a **normal** good.
- B. Peanuts are an **inferior** good.
- C. Eric is a **normal** consumer.
- D. Peanuts are actually a **luxury** good!
- E. Not enough information to answer the question

18. The figure below shows two **budget constraints** for a consumer choosing between goods X and Z. The change that has caused a move from constraint 1 to constraint 2 is:

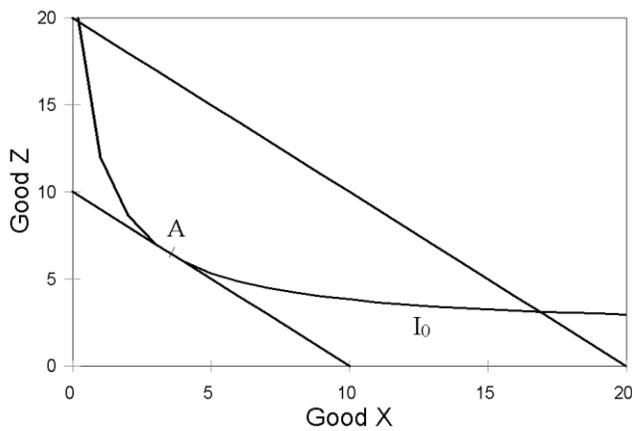


- A. An increase in the price of X
- B. A decrease in the price of X
- C. An increase in the price of Z
- D. A decrease in the price of Z
- E. An increase in income.

19. Suppose the average wait for vehicles to cross the Bay Bridge at 8 am is 30 minutes. The toll currently is \$6. Suppose also the average value of waiting time for drivers is \$40 per hour. What is the efficient level of the toll?

- A. \$40
- B. \$26
- C. \$20
- D. \$6
- E. \$0

20. The figure below shows the consumption choices made by the consumer at point **A** (where they are on indifference curve I_0) along an initial budget constraint between quantities of goods X and Z. When the budget constraint switches in the way shown, we can conclude



- A. The person will consume **twice as much** of both goods.
- B. The person will consume **more** of each good.
- C. The person will consume **more of one good but less of the other**.
- D. The person will be **twice as happy**.
- E. The person will be **happier**.