

**Eco 1: Principles of Economics**  
**Prof. Frank R. Gunter**  
**Quiz 1**  
**February 17<sup>th</sup>, 2020**

Name: \_\_\_\_\_

Recitation TA's Name: \_\_\_\_\_

Recitation Section Number: \_\_\_\_\_

Quiz classroom (the room you are taking the quiz in) \_\_\_\_\_

**Please read and follow the instructions carefully before you begin.**

Do not open the quiz until the start of the quiz is announced.

After you have completed the quiz, please sign below indicating your honest work during the quiz in the spirit of the Lehigh Academic Integrity Policy:

*"The work in this exam is entirely my own. I have neither received nor have I given assistance from/to anybody during the exam".*

\_\_\_\_\_  
(Your signature)

1. Indicate your answers clearly.
2. Do your own work!
3. No calculators, cell phone, notes, textbooks, etc. Just your student ID, pen (or pencil) and the exam on the table, please.
4. Read questions carefully. For identification questions, you must provide a sentence or sentence fragment that shows that you understand the word or phrase. For short answer questions, you must show your work. The correct answer by itself may not be sufficient for a full credit.
5. If you need to make any assumption in short answer questions, please indicate them clearly.
6. Julius Caesar preferred fat advisors.
7. You have one hour from the start of the quiz to finish your work.
8. If you believe that an assumption is necessary to answer the question, make the assumption explicit

Your Name: \_\_\_\_\_ Your TA's Name: \_\_\_\_\_

**I. IDENTIFICATION (3 points each)**

**1. Marginal cost.**

**2. Normative economic statement**

**3. Production possibilities frontier model**

**4. Moral hazard**

**5. Principal-agent problem**

**6. Complements in consumption**

**7. Income elasticity**

**8. Inelastic supply**

**9. Market failure**

**10. A positive externality**

**11. Merit good**

**12. Rival good**

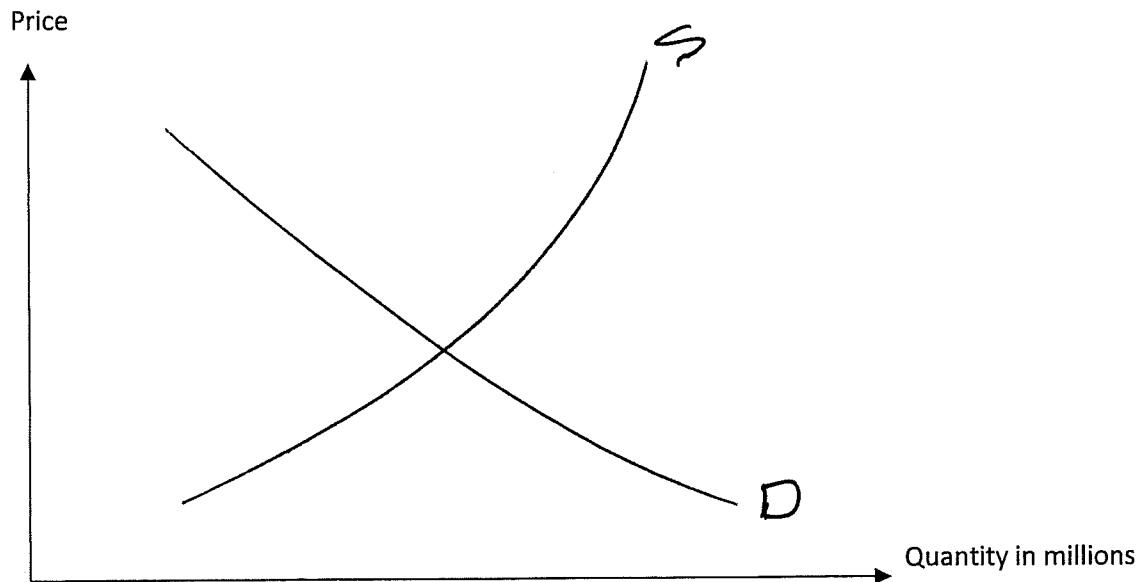
**13. Binding price floor**

**14. Producer surplus**

**15. "Let me have men about me that are fat; Sleek-headed men, and such as sleep o' nights: Yond Cassius has a lean and hungry look; He thinks too much: such men are dangerous." Is from which Shakespeare play? A. Hamlet, B. Romeo and Juliet, C. Cassius the Great, or D. Julius Caesar.**

## SHORT ANSWER QUESTIONS

1. The graph below represents the market for artisan bottled water in America.



a. Using the graph above, please show the market equilibrium for the price and quantity. Label this equilibrium price, \$3, and label the equilibrium quantity, 2000. (2 points)

b. The water comes in a plastic bottle. Due to concerns the government has about plastic's effect of environment, it taxes all types of plastic used in packaging and production. Which curve, if any, will move and in which direction? Why? Show the change on the graph. What is new equilibrium price and quantity? (6 points)

c. The artisan water is viewed as a luxury good. As people's income decreases due to onset recession, which curve, if any, will move and in which direction? Why? Show the change on the graph. (4 points)

d. The company decides to hire a doctor, named John Doe, as a spokesperson, to share the benefits of artisan water's consumption. As people learn the news, which curve, if any, will move and in which direction? Why? Show the change on the graph. Finally, consider all changes in parts b, c and d (tax on plastic, income decrease and the positive news about the water). What is the final equilibrium price and equilibrium quantity. (6 points)

2. This table shows the number of labor hours required to produce a motorcycle and a guitar in Ireland and Scotland.

|          | <b>One Motorcycle</b> | <b>One Guitar</b> |
|----------|-----------------------|-------------------|
| Ireland  | 10 hours              | 5 hours           |
| Scotland | 10 hours              | 4 hours           |

a. Assume each country has a total of 200 labor hours to devote to the production of the two goods and devotes exactly half of the time for making each good. If the two countries do not trade and consume whatever they produce, identify the current production and consumption for each country. (5 points)

b. Suppose the two countries specialize and trade. Based on the assumption of total 200 hours of labor available in each country, which country should produce motorcycles and which should produce guitars? Explain your answer. (6 points)

c. Did specialization increase the combined output for the two countries for each good without any increase in resources? If so, by how much? (6 points)

d. Has trade made the two countries better off? Explain your answer. (2 points)

3.

a. According to the study by the U.S. Centers for Disease Control and Prevention, Americans purchase about 360 billion cigarettes each year. The government wants to reduce the number of smokers in the society. Would you recommend to tax the cigarettes? Why or why not? The tobacco products carry a 2% tax (on top of 6% sales tax) in Philadelphia county. With the goal of reducing number of smokers in mind, should the tax be levied on the smokers or producers of the cigarettes? Please explain briefly. (6 points)

b. Back in a day Tom earned \$20,000 a year and he used to buy 100 units of bountybounce and 50 units of snickerknees. Then after he graduated college his income increased to \$100,000 and he started buying 200 units bountybounce and 25 units of snickerknees. How does Tom view bountybounce and snickerknees according to his consumption and income pattern? (6 points)

c. Sally has a company called Salty Soup Inc. and it sells salt for cooking, priced at \$0.50 per pound. Sally learns that people spend a very small fraction of their income on her product. After long consideration she decides it is time to increase the revenue and in hopes of doing so she cuts the price in half to \$0.25. Was it a good idea to cut the price in order to increase the revenue for Sally's company? Why or why not? (6 points)