

**NAME** \_\_\_\_\_

**Student ID** \_\_\_\_\_

**Cooleconomics.com**  
**Principles of Economics**

**Final Exam**

You have a maximum of 150 minutes to complete this 200-point exam.

This is a closed-book, closed-notes exam. A 1-sided 8.5 x 11" notes sheet may be used. A calculator whose memory and programming are cleared may also be used

Calculations must be shown to receive any credit on questions that require calculations.

For questions that require explanations, your score depends entirely upon your explanation. Please demonstrate knowledge obtained in this class as precisely as possible.

Graphs must be fully labeled (each axis, point, and curve) to receive any credit.

Any student observed by the professor to be looking at another student's exam shall have his/her exam taken and shall receive an F for the course.

University of St. Thomas regulations prohibit me from returning your final exam to you. You may, however, view your final exam next semester in my office

**1. (60 points)** The United States has had persistently high trade deficits for many years. Answer (a)-(f) below in the context of an AD/AS/LRAS model (#5).

a) Name a change in United States government policy that will reduce the U.S. trade deficit for many years. Clearly explain why your policy change will reduce the trade deficit for a long time. Employ at least 1 equation in your explanation.

b) Carefully and fully explain how your policy change may affect the value of the U.S. dollar relative to foreign currency—will the dollar *appreciate*, *depreciate*, or be *unaffected*?

c) Carefully and fully explain how your policy change will affect the amount of lending that foreigners do to the United States.

d) Clearly and fully explain how your policy change will affect the U.S. long run budget surplus. Employ at least 1 equation in your explanation.

e) Clearly and fully explain how your policy change will affect U.S. consumption in the *short run*. Employ at least 1 equation in your explanation.

f) Use 1 or more graphs to illustrate the *short run and long run* effects of your policy change on the U.S. economy, assuming no government interference in the transition phase of the business cycle. (Fully label your graph(s); no numbers are required.)

2. (40 points) Below there are 4 graphs, (a)-(d), of 4 firms below. For each graph:  
 i) Name the category of market structure (of the 4 categories discussed in class) in which the firm operates

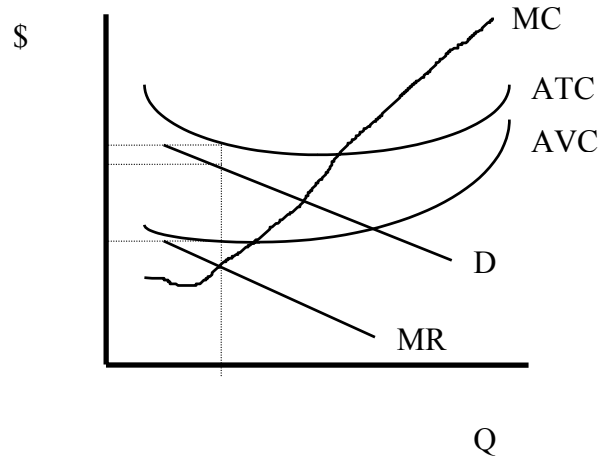
ii) Explain whether the graph depicts the firm in the *short run* or the *long run*

iii) Explain which of the following is correct:

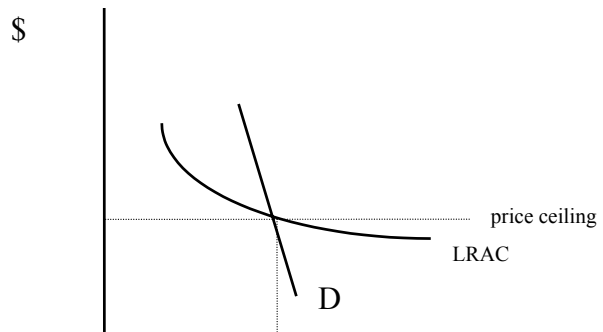
- the firm is making a profit
- the firm is breaking even
- the firm is operating at a loss
- the firm is shut down

iv) On each graph, shade in an area representing the firm's profit or loss (if any)

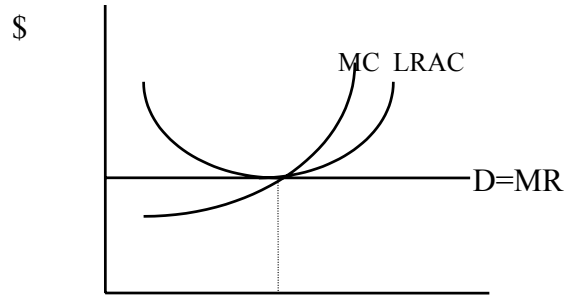
a)



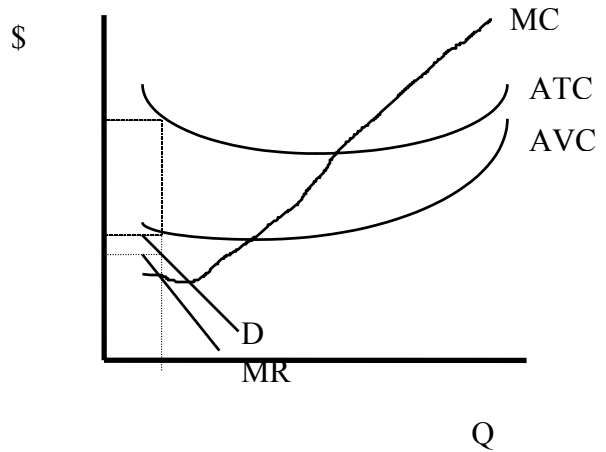
b)



c)



d)



**3. (10 points)** The President of the country of Xerk worries that future generations of Xerkians will not be much better off materially than the current generation of Xerkians. What policy can the President propose now that, if implemented, may help future generations of Xerkians? Will the present generation of Xerkians go along? Fully and clearly explain using information consistent with model #5.

**4. (10 points)** Next month the Fed may reduce the discount rate. Explain, in the context of the AD/AS model (#4) how this action will affect the U.S. budget surplus in the short run.

**5. (10 points)** In a fake world there are only 2 countries—X and Y—and 2 goods—chips and soda. Country X is 10 times better at chip production than country Y. Country X is 20 times better at soda production than country Y.

**Can the two countries benefit from trade?** Clearly explain why or why not. (Explain the pattern of trade (exports and imports), if trade allows the countries to benefit.)

**6.(15 points)** The market for wheat is in equilibrium.

a) Draw the equilibrium on a nice big well-labeled graph.

b) Now the government imposes a price floor on wheat above the equilibrium price.

--illustrate the effects of the price ceiling on your graph above.

--shade in an area on your graph above representing the tax revenue required to buy the surplus created by the price floor.

**7. (10 points)** When the price of apples was \$3 each, buyers bought 100 of them. When the price was decreased to \$2 each, buyers bought 300 of them.

--Calculate the price elasticity of demand for apples using the "midpoint formula."

**8. (10 points)** The market demand for broccoli is represented by :  $Q_d = 100 - 15P$

The market supply of broccoli is represented by  $Q_s = 4 + 9P$

Use the above equations to determine the equilibrium price and quantity of broccoli.

**9. (10 points)** Assume that the gasoline market is competitive. Now two events occur simultaneously: reduced driving in the Winter causes drivers to want to buy less gasoline, and increased gasoline imports cause a larger gasoline supply.

Use a fully labeled graph of a competitive market to illustrate the effect of these events on market equilibrium.

**10. (12 points)** In the short run a brush maker is selling 200 brushes for \$4 each, making a total profit of \$60, with total fixed costs of \$30

Use the above information to fill in the blank spaces below.

Average Fixed Costs \_\_\_\_\_

Total Costs \_\_\_\_\_

Total Revenue \_\_\_\_\_

Average Variable Costs \_\_\_\_\_

**11. (13 Points)** Buffy has purchased pretzels and pizza so that after her income has been spent, her marginal utility from pretzels is 100 utils, and her marginal utility from pizza is 400 utils. Pretzels are \$10 each; pizza is \$5 each.

--Is Buffy maximizing her utility? Explain why or why not. If she is not, indicate whether she should buy MORE or FEWER pretzels and MORE or FEWER pizzas. Also, be sure to precisely use the utility-maximizing rule in your response.