

The Last One!

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (30 points) Show all work for all parts of this question and briefly explain what you did. Suppose the USA and Mexico each had 600 units of labor. In the USA it takes 20 units of labor to make a computer and 10 units of labor to make a television. In Mexico it takes 25 units of labor to make a computer and 5 units of labor to make a television. What is the relative price of a computer in each country? If both countries used half of their labor to produce each good, how much of each good would each country produce? Prove that if the two countries specialize, they can produce more and trade to leave both countries better off. Make sure you find the outputs of each country, the price they trade at, and the quantities going each direction.

2) (15 points) Explain the economic logic why the *efficiency of exchange* equation makes sense. $MRS_{XY}^A = MRS_{XY}^B = P_X/P_Y$.

3) (10 points) Explain the economic logic as to how public goods cause market failures.

4) (25 points) Draw the supply and demand for high quality used cars and low quality used cars. Show what happens when it is impossible for the buyer to determine which is which. Explain why the curves moved as drawn. What does this imply about used cars?

5) (20 points) What is meant by *adverse selection*? Give an example from banking. How do banks reduce the problem? Explain how that action reduces the problem.