

Place your name on the back of this sheet of paper and nowhere else. Staple your answers 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) (40 points) The two goods are cars (capital intensive) and oranges (labor intensive). Assume that the USA is capital abundant and Mexico is labor abundant. Draw two countries' PPF/CPF diagrams on ONE set of axes. Assume the two countries have identical tastes. Explain why the curves take the shape they do. Illustrate the autarky situation. How did you find that? Illustrate on the diagram what will happen when they open to trade. Explain how you knew which country exports which good, how your diagram shows both countries gaining from trade, and that each country is exporting exactly the same amount the other country is importing. Why do both countries gain?

2) (40 points) Draw the PPF/CPF diagram for two countries with identical PPFs and different tastes. Assume the two goods are chicken wings and pizza. Find the autarky production points for both countries. Explain how you found them. Illustrate on the diagram what will happen when they open to trade. Explain how you knew which country exports which good, how your diagram shows both countries gaining from trade, and that each country is exporting exactly the same amount the other country is importing. Why do both countries gain?

3) (10 points) Why must the $MRT = MRS$ to maximize utility? State what the two are and explain why they must be equal.

4) (10 points) Given what we learned about how a small country gains from trade, do you think a large country gains from trading with a small country? If yes, explain how they gain. If no, then explain why they cannot gain.