

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet and any graph paper you used with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (12 points) Answer EITHER Part A OR Part B.

A) We said that in equilibrium, the $MRT_{XY} = P_X/P_Y = MRS_{XY}$. State what two of those three terms means and why those two should be equal.

B) Draw a pair of offer curves which cross in three points. Determine if the center intersection is stable or unstable. Explain your logic.

2) (18 points) Answer EITHER Part A OR Part B.

A) Draw the general equilibrium supply and demand for trade diagram for snow shovels. Explain how you can find both countries' autarky prices. Why does that work?

B) Draw one PPF/indifference curve diagram for two Argentina and Egypt. Assume they have identical tastes but not identical production capabilities. Show the free trade equilibrium. Tell me what you did and how you know that Argentina's exports are the same volume as Egypt's imports.

2) (30 points) Draw a normally shaped (curved) PPF for lamps and carrots with carrots on the horizontal axis. Draw three CPF lines with the following slopes: $-1/2$, -1 and -3 . Let the first line be the autarky CPF. Add the three indifference curves which show how much the country will consume at each price. Which good is this country going to export? How can you tell? Draw that country's offer curve which corresponds to the points you drew. Explain how you got it and how you knew which order to connect the dots.

4) (40 points) Suppose Mexicans make 10 hats per hour and 15 dresses per hour. Americans make 4 hats per hour and 10 dresses per hour. Assume both countries have the same 300 hours of labor available. Which country has an absolute advantage in each good? Explain your logic. Which country has a comparative advantage in each good? Show all work and explain your logic. What range of relative prices would the countries be willing to trade at? Choose a price in that range for use in the rest of question. Explain your logic. Draw the straight line PPF/CPF/indifference curve diagram for EITHER country which illustrates them trading at the world price you chose. Prove that country is better off with the trade than autarky. Draw the supply and demand for EITHER hats OR dresses such that the relative price is the price you chose. Explain why the graph looks as drawn.

5) (up to 4 points Extra credit) Answer EITHER Part A OR Part B.

A) In reality, the offer curve diagram is really a diagram with four quadrants. (In other words, the X and Y variables can be either positive or negative.) Draw the full diagram and use it to explain why we do not need the other three quadrants.

B) Draw the offer curve which corresponds to the straight line PPF. Explain why it takes its shape.