

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) (35 points) Draw an Edgeworth Box for Amanda and Bill. There are 20 pears and 15 shirts. Draw three indifference curves for each person such that you can find three points on the contract curve. State how you know they are on the contract curve. Draw the contract curve. Find a point where two indifference curves cross, i.e. not tangent. Prove that the point is not Pareto optimal. Who has a higher marginal valuation of pears at that point? Explain your logic.
- 2) (10 points) Explain how you get the utility possibilities frontier. You may want to refer to your answer to Question #1.
- 3) (35 points) Draw a PPF/CPF/indifference curve diagram for hats and apples where apples are on the horizontal axis. Draw the closed economy equilibrium. State how you found it. Suppose our price of apples is less than the rest of the world's price of apples. Draw a new CPF which shows the world price. Find the new production and consumption points. Explain how you found them.
- 4) (15 points) What is the Rawlsian social utility function? What is the problem with it?
- 5) (5 points) Explain the general concept which enables everybody to gain from trade in cases like Question #3.