

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) (25 points) Draw a PPF for a country which has increasing returns to scale (IRTS), a.k.a. economies of scale. Explain why it takes its shape. Use it to explain how two countries with identical production capabilities and tastes could gain from trade if there is IRTS.
- 2) (5 points) All the theories of intra-industry trade assume differentiated products. Why must they have differentiated products?
- 3) (10 points) Suppose that we export \$200 worth of cars and import \$100 worth of goods. What percentage of our trade in cars is intra-industry trade? Show all work and briefly explain what you did.
- 4) (25 points) Draw the diagram with price and average costs on the Y-axis and the number of firms on the X-axis. Explain why both lines look as drawn and why the one moves when we open to trade. Why is the book's label of "\$" on the axis wrong?
- 5) (25 points) Draw the cost/demand diagram for a monopolistically competitive firm. Explain how you can tell the profit maximizing output two different ways. Explain how we know both are profit maximizing.
- 6) (10 points) On the graph of the product cycle, why is production and consumption the same in Stage I? The graph does not really show intra-industry trade. Why do I say that?