

### Midterm Exam 1

The total time for the exam is 60 minutes, although you are given 70 minutes to complete it. Points are allocated proportionally to the time allocations.

1. [25 minutes total] Heckscher-Ohlin.
  - a. (10 minutes) Draw the "Johnson Diagram", where cloth is labor intensive and food is land intensive, and home is land abundant, *assuming that both countries are initially specialized under free trade*. Analyze the effect of an increase in the amount of land in Foreign that causes both countries to be non-specialized.
  - b. (10 minutes) Using a PPF/relative price/social indifference curve diagram for Home, show what happens when this event occurs. Is Home better off relative to conditions before Foreign increased its endowment of Land?
  - c. (5 minutes) Is Home better off relative to the situation under autarky? Explain, using a diagram.
  
2. [15 minutes total] Consider a small country that imports widgets initially under free trade.
  - a. (10 minutes) Show the impact of a tariff  $t$  on widgets, clearly labeling the change in consumer surplus, producer surplus, consumption side dead weight loss, and production side dead weight loss.
  - b. (5 minutes) On net is the country better or worse off?

**[Exam continues, Turn page over]**

3. [20 minutes total] The following shows the labor time necessary to produce one unit of the good in a Ricardian model of trade:

	<u>Biotech</u>	<u>Airliners</u>
US	400 worker-days	200 worker-days
Europe	250 worker-days	500 worker-days

- a. (7 minutes) Which country has a comparative advantage in what good? If the US has 400,000 workers, draw and label the country's PPF. Show graphically the production and consumption point for the US under autarky (assume that you know the preferences of the country).
- b. (7 minutes) Suppose that trade opens up. Show graphically the US production and consumption points under trade (assume that you know the world prices of the goods).
- c. (6 minutes) Can the consumption of Biotech be smaller with trade? Can the consumption of Airliners be smaller with trade? In what sense is the country better off?

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