

**Economics 1
Swarthmore College
Midterm Exam #1**

Prof S. O'Connell

Fall 2006

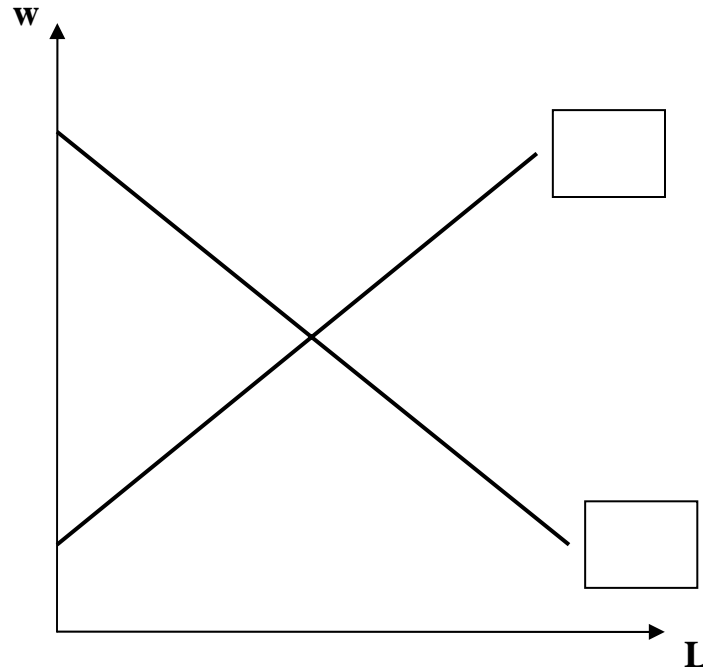
Student's Name: _____

INSTRUCTIONS:

1. Please write your name above and **do not identify yourself anywhere else on the exam.**
2. You have 55 minutes to complete the exam. The exam is also worth 55 points, so you should take a little less than 1 minute per point, in order to have some time to check at the end.
3. Answer all questions. Read each question carefully first, and make sure you understand what is being asked. Your answers can be short and to the point. Partial credit will be awarded, so if you do not know how to answer a question well, tell me briefly what you DO know.
4. Make sure you write legibly and label your diagrams clearly.
5. You must end at the announced time or I will reduce points.

PART 2. [33 points] Using analytical diagrams. Answer all parts of each question.

4. [11 points] The diagram below shows a supply and demand for unskilled labor in a market in which both firms and workers are price takers (i.e., there are no unions or dominant employers). Use the diagram to answer questions (a) through (c) below.

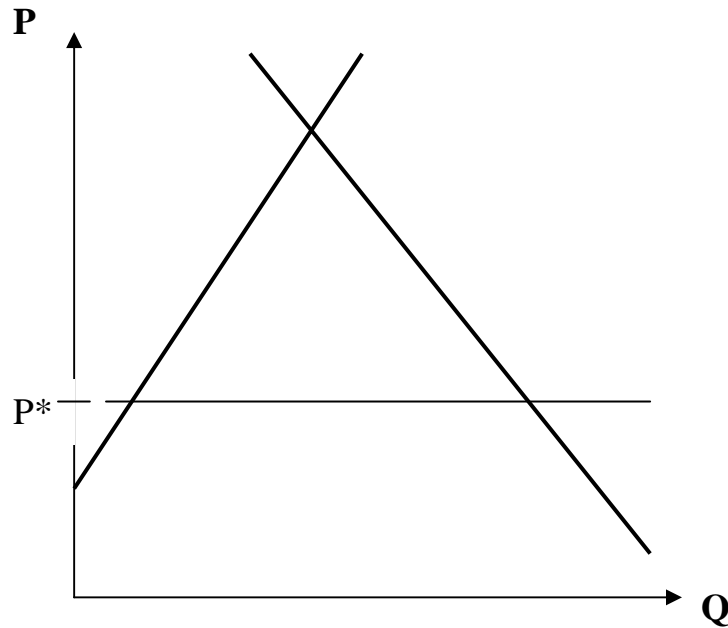


- a. [3 points] Label the supply (S) and demand (D) curves in the boxes provided.

- b. [4 points] In your diagram, show the impact on employment of imposing a minimum wage at a level above the equilibrium wage. Explain briefly here why employment rises, falls, or remains unchanged.

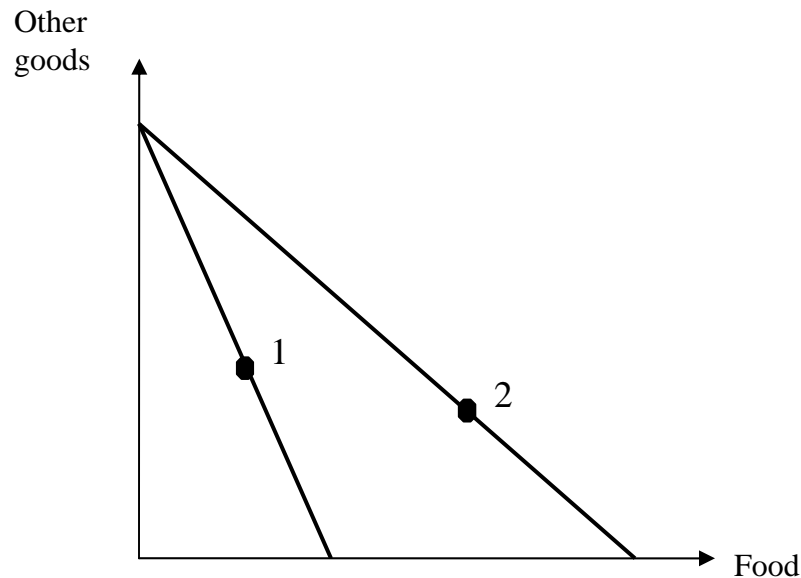
- c. [3 points] Suppose the demand curve were less elastic than the one shown, at the original equilibrium point. Would employment change by *more* or *less* (indicate here: _____)? Show this clearly in your diagram.

2. [11 points] The diagram below shows a country that is a price-taker in the market for imported automobiles (meaning that the world price P^* doesn't depend on how much this country imports or exports). This country is considering placing a 50 percent tariff on imported cars, as a way of protecting domestic automobile producers. Use the diagram to answer (a) through (c) below.



- [4 points] In your diagram, show the quantity of autos produced by domestic import-competing firms, the total amount purchased by consumers, and the quantity imported, all *before the tariff is imposed*.
- [3 points] In your diagram, clearly show how the tariff *changes* the domestic price, the quantity produced by domestic firms, the quantity purchased by domestic consumers, and the quantity of imports. (Do this for the case where imports remain positive.)
- [3 points] Parliament asks for a cost/benefit analysis of the tariff policy. In your diagram, show how you would calculate the short-run net gain or loss to the country relative to a zero tariff. Briefly say here who wins and loses, by how much, and what the net gain or loss is.

3. [11 points] You are advising the government on two alternative ways of raising the well-being of poor households. One approach is a food subsidy program where the government buys food at the market price and then sells it to these households at a lower price. In the diagram below, suppose that this food subsidy program would shift the typical poor household from point 1 to point 2. The second approach is simpler: just give poor households *the exact amount you would have spent on the subsidy program*, but as cash, without any restrictions. Neither program has any administrative costs. Use the diagram to answer questions (a) through (c) below.



- a. [3 points] Explain why the food subsidy program rotates the budget line of the household as it does in the diagram.
- b. [4 points] Use indifference curves to locate a third budget line that shows the income effect of the price subsidy program. In what sense does this exercise reveal the 'income equivalent' of the subsidy?
- c. [3 points; Difficult] Now explain why poor households would be better off if the government just gave them money directly, rather than indirectly through food subsidies.

PART 3 [10 points]. Short (one paragraph) essay.

4. [10 points] Suppose we all want to reduce CO₂ emissions in the USA very substantially, and we want to do this by limiting imports of fossil fuels that embody emittable carbon. What are the *two most important reasons* (in your view) Barnes gives for preferring his own proposal to a simple 'command' system that tells importers of fossil fuels exactly how much each of them can import? Be brief and concise.

END OF EXAM

THE BLANK PAGE ON THE BACK IS FOR SCRATCH WORK OR CORRECTIONS.

