Exam I Study Questions

A. Direct Questions

1. On a two-dimensional graph, with X measured along the horizontal axis and Y measured along the vertical axis, how would technological improvement in the production of Y be shown on a Production Possibilities Frontier?
2. Suppose that the demand curve and the supply curve for wheat both shift to the right. What will be the impact on the price of wheat and the quantity of wheat sold?
3. Economically, what constitutes a shortage of wheat?
4. If demand increases and supply decreases, what would be the impact on the new equilibrium price and the new quantity transacted?
5. If an increase in the price of one good causes the quantity demanded of another good to decrease, what is the relationship between these two goods?
6. What are the two reasons given in class as to why the demand curve reflects an inverse relationship between the quantity demanded and the price of the good?
7. With the opening of trade between two countries with unequal no-trade prices, what is the impact on the price, production and consumption in each country?
8. What is the relationship between opportunity cost and comparative advantage?
9. What is “protectionism”, and how does protectionism affect consumers and producers?
10. What happens to the value of the dollar when ..... ? (a) Japanese businessmen increase their business and pleasure trips to the United States, (b) Indonesian industrialists invest in U.S. mutual funds, and (c) Mexican government finance officials intervene to prop up the peso.
11. What is the “Euro”, and what impact might the Euro have on international commerce?
12. What are the mechanisms whereby dollar markets and Deutschmark markets are linked?
13. How do we show increasing opportunity costs associated with increased production along a concave PPF?
14. In a supply-demand framework, if supply shifts to the right, what is the impact on consumer surplus? ....on producer surplus?
15. Using producer and consumer surplus areas, show the impact of imposing a tariff on what had been a freely traded good.
16. Why do we import manufactured goods from Mexico when we can make them more cheaply within our own borders?
17. What is the connection between a concave PPF and a supply function?
18. What is the process whereby a pure “gold standard” is a “self-correcting” mechanism?
19. How do we show “gains from trade” (gains from specialization and exchange) in a 2-nation, 2-good framework? What are the limits on the “terms of trade”?
20. How do changes in income, interest rates and inflation affect a country’s currency value?
Problems:

1. Suppose that on any given day the population on a desert island can expect to either catch fish or gather fruit according to the following schedule:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pieces of fruit</td>
<td>54</td>
<td>50</td>
<td>42</td>
<td>32</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Number of fish</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

   a. With Fish on the horizontal, plot the Production Possibilities Frontier for these data.
   b. Calculate the opportunity cost of fish from B to C and from D to E.
   c. Calculate the opportunity cost of fruit from point B to point C.

2. Imagine a supply-demand diagram depicting the national market for popcorn, with initial equilibrium prices and quantities. Six events are listed that affect the popcorn market. For each of these events, state the impact on the price (Increase, Decrease) and on the quantity transacted (Increase, Decrease). Analyze each case independent of each of the other cases.
   a. A severe drought in the Midwest reduces the popcorn harvest by a substantial amount.
   b. Scientists at Duke University discover that buttered popcorn is the leading cause of clogged arteries that lead to major heart attacks.
   c. Scientists at Purdue University develop a genetically-altered seed variety that increases average popcorn yields by 30 percent.
   d. Terrorists around the world destroy twenty percent of the world’s oil refineries.
   e. The federal government introduces a policy of providing popcorn for school snack programs for elementary children.
   f. An industry forecast is released that suggests increasingly tight supplies and unusually high future prices of popcorn.

3. In one hour, Barry can either iron 4 shirts or fold 2 baskets of laundry, while in the same time, Mary can either iron 5 shirts or fold 7 baskets of laundry. Calculate the opportunity cost of ironing and folding for each person. HINT: Assume Barry and Mary have four hours each to do their chores, and draw the (linear) PPF’s for each person.

4. Suppose there are three countries in the world with three different national currencies, the U.S. dollar ($), the French franc (FF), and the German Deutschmark (DM). These three countries post the following dis-equilibrium exchange rates:

   1 DM = 3 FF          $1 = 2 DM          5 FF = $1

   1. Show how a trader could profit from these dis-equilibrium exchange rates.
   2. Calculate the correct DM to FF (or FF to DM) exchange rate, assuming the other two exchange rates remain unchanged.