Problem Set 2
Collaborative Learning

You also want to click the Article Link for CL2 and print off “Economic Lunacy,” which you should read prior to attending your CL meeting.

1. Suppose that you own a small restaurant. You employ two people, Jack and Diane, to perform cooking and cleaning duties. You want to allocate the tasks between Jack and Diane in a way that maximizes total production.

   a. Why would you not want to allocate the cooking and cleaning equally between Jack and Diane?

   b. Suppose that Jack cooks faster than Diane, with the same quality, and Diane cleans faster than Jack. Who would cook and who would clean? Why?

   c. Now suppose that Jack cooks faster than Diane and Jack cleans faster than Diane. Would you assign both tasks to Jack?

   d. Suppose that in 30 minutes, Jack cooks 6 dinners and Diane cooks 2 dinners. In 30 minutes, Jack cleans 6 areas of the kitchen and Diane cleans 3 areas. Who performs each task? Explain.

   e. Does this problem seem familiar to you?

2. Suppose that an hour of work in Germany can produce 5 pastries or 4 sausages. In Denmark, an hour of work produces 4 pastries or 3 sausages.

   a. Which country has the absolute advantage in pastries? The absolute advantage in sausages?

   b. Calculate the opportunity cost of each good in each country.

   c. Which country has the comparative advantage in each good? Why?

   d. What would be a mutually beneficial terms of trade?

3. Market Demand for Gasoline

<table>
<thead>
<tr>
<th>Price per gallon</th>
<th>Quantity demanded (mil. of gal. per wk.)</th>
<th>Qd’</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.50</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>1.40</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>1.30</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>1.20</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>1.10</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>.90</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>.80</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>
a. Given the table above, fill in your own hypothetical data for an increase in demand under Qd'.

b. What is meant by an increase in demand?

c. Sketch both the old and new demand curves on a graph.

4. Consider the market for minivans. For each of the events listed, identify which of the determinants of demand are affected. Also indicate whether demand is increased or decreased.
   a. People decide to have more children.
   b. The price of station wagons rises.
   c. A recession reduces average family income.
   d. Because of an autoworker strike, people believe that the price of minivans will rise in the future.

5. True/false/explain.
   a. Economic models must mirror reality or they are of no value.
   b. When economists make normative statements, they are more likely to be acting as scientists.
   c. If a country's workers can produce 5 hamburgers per hour or 10 bags of fries per hour, then absent trade with other countries, the price of 1 bag of fries is 2 hamburgers.
   d. If trade benefits one country, its trading partner must be worse off as a result of trade.
   e. If an advanced country has an absolute advantage in the production of everything (relative to certain less developed countries), the advanced country will benefit if it eliminates trade with less developed countries and becomes self-sufficient.
   f. Demand simply refers to consumer wants.
   g. Geometrically speaking, demand refers to a point on a demand curve related to a particular price.
   h. The law of demand is the observation that buyers tend to buy more when their incomes rise and less when their incomes fall.
6. The following questions are based on the article, “Economic Lunacy,” by Walter Williams.

a. Draw a PPF of the Gulf Coast economy, showing one appropriate output on the horizontal axis and All Other Goods on the vertical axis. (Construction of buildings, broadly defined to include demolition and cleanup, is one possible good.)

b. Show the effect of Hurricane Katrina on the PPF.

c. Show the effect of the cleanup work and rebuilding on the PPF.

d. Is Prof Woodward right or wrong when he says “a construction boom and job creation offset the short-term negatives such as loss of business activity, loss of wealth in the form of housing, infrastructure, agriculture, and tourism revenue in the Gulf Coast states”? Explain.

e. Use your PPF to show “what is not seen” (by economists Woodward and Chan) regarding the rebuilding activity after Katrina.