Problem Set #2

1. What component of GDP (C,I,G,NX), if any, would each of the following transactions affect? Explain.
a. Pitzer buys an original Rembrandt painting.
b. Aunt Jane buys a new house.
c. Ford sells a Thunderbird from its inventory.
d. You buy a pizza from San Biagio’s in Upland.
e. California repaves the Pacific Coast Highway.
g. Honda expands its factory in Marysville, Ohio.
h. Your rich uncle buys some stock in Sprouts Farmers Market.
i. BMW buys some land in Tennessee for a new auto plant.
j. A family buys a new refrigerator.

2. Consider the economy of Junk Food City which produces three goods.

<table>
<thead>
<tr>
<th>Production (in number of units)</th>
<th>Price per unit (in dollars)</th>
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</thead>
<tbody>
<tr>
<td>Pizza</td>
<td>2011 2012 2013</td>
</tr>
<tr>
<td></td>
<td>1 1.5 2.5</td>
</tr>
<tr>
<td>Beer</td>
<td>200 300 400</td>
</tr>
<tr>
<td></td>
<td>1 2 2</td>
</tr>
<tr>
<td>Wings</td>
<td>250 300 250</td>
</tr>
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<td>3 4 5</td>
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</tbody>
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a. What is nominal GDP in 2011, 2012, and 2013?
b. What is real GDP in 2012 and 2013 using 2011 as the base year?
Suppose that the typical consumer in Junk Food City spends 40% of her budget on pizza, 35% on beer, and 25% on wings.
c. What is the consumer price index for 2012? for 2013? (Use 2011 as the base year)
d. How much inflation was there from 2012 to 2013 using the consumer price index?

3. What is the labor force status (employed, unemployed, not in labor force) of each of the following:
a. A 15 year old teenager who is searching for her first job.
b. A parent who stays at home full time with their children and is not looking for a job.
c. A person who is on temporary medical leave from their job.
d. A retired economics professor who has taken a job driving a taxi full time.
e. A person who has joined the Armed Forces.
f. A recent college graduate who is spending all of her time going to job interviews.

4. The Bureau of Labor Statistics (BLS) considers an individual to be employed as long as they have worked at least one hour during the last week, which means that many part-time workers are counted as ‘employed.’ How would our unemployment statistics change if the BLS only counted workers who had worked at least 40 hours in the past week (i.e. looking only for those employed full time)? How should the BLS classify part-time workers?

5. The natural rate of unemployment differs from country to country. This suggests that the natural rate of unemployment could be changed within a country. What sort of policies
(regardless of whether you think they are good or bad) would be likely to lower the natural rate of unemployment? Suggest at least two.

6. Suppose everyone expects the inflation rate in 2014 to be 2% and behaves accordingly. If the inflation rate actually ends up being 7%, who is hurt and who is helped?

7. The misery index is an economic indicator, created by economist Arthur Okun, which is found by adding the unemployment rate to the inflation rate. We currently have an inflation rate of 1.5% and an unemployment rate of 6.6%, giving us a misery index of 8.1%. Do you think we would be just as “miserable” if the inflation rate was 6.6% and the unemployment rate was 1.5%? Explain.

Due Thursday 20 February