Week 1 Problem Set

Complete the following problems. Please insert your answers on this document. Submit the completed problem set to Blackboard.

1. Highlight the goods and services included in the computation of the US Gross Domestic Product.

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| Quadruple by-pass heart surgery | Employee takes unpaid leave |
| Auction of 1964 Ford Mustang | Family purchases new home computer |
| Purchase of a new, cheap, legally manufactured handgun ( “Saturday night special”) | General Motors exports a new car manufactured in Detroit to China |
| Rebuilding the Atlantic City boardwalk after Hurricane Sandy (GDP for the year of rebuilding) | Boeing imports a precision computer-controlled lathe from Germany |
| Family plants a garden and consumes the produce | Airbus sells a new A-320 aircraft build in Europe to American Airlines |
| A pool service company maintains the family pool | CPA prepares a tax return |
| Sale of illegal drugs | Woman receives her social security check |
| Handy-man is paid in cash by homeowner | Medicare contracts with US company to build a website |

1. Using the Bureau of Economic Analysis (<http://www.bea.gov/national/>) data for “Current-dollar and Real GDP,” (find using the search within the website) create 2 RGDP line graphs from the “GDP in billions of current dollars” statistics. Use MS Excel (or similar spreadsheet application) to create the graphs, and then import each graph into this problem set. For the 1st graph, use the yearly GDP statistics to create a graph from 1946 through 2012. For the 2nd graph, use the quarterly data to graph GDP from 2007 to now. Appropriately label each graph. For help on creating a graph in Excel, see the notes at the end of this problem set.
2. List and briefly define the 4 components of a nation’s demand for goods and services.
3. Explain 2 equivalent ways of showing that the macro economy is in equilibrium.
4. If firms produce more goods and services (GDP) than households wish to purchase, what happens the unpurchased goods (where would these goods be recorded)? What is the likely cycle that follows?
5. Locate the unemployment rate graph from the Bureau of Labor Statistics (<http://data.bls.gov/timeseries/LNS14000000>). Create 2 graphs. First, adjust the graph from 2006 to the present. For the 2nd graph, use 1948 to present. Copy and import both graphs into your document.
   1. What was the highest unemployment rate during the Great Recession of 2008 and what is the current rate?
   2. When was the last recession where the US unemployment exceeded 10%? Compare the rate of recovery in employment from that recession to the Great Recession of 2008.
6. Briefly define the 4 types of unemployment.
7. The Federal Reserve Bank of St. Louis publishes a wealth of macroeconomic data, in databases known as FRED (Federal Reserve Economic Data). Most data are available in charts that are easily customized. Go to the FRED homepage (any internet search engine will work), then locate the Civilian Labor Force Participation Rate data (FRED has a convenient search feature). Adjust the chart from 1960 to present. Copy and paste into your document (you may wish to make a screen shot).
   1. Define the labor force participation rate.
   2. Characterized the participation rate from 1960 to the present.
   3. Why is this participation rate important for the US economy?

Excel is extensive utilized in business, so Excel skills are valuable. Here’s a brief outline for creating a graph in Excel. Other graphical applications may be used.

1. Select the data, copy and paste into Excel.
2. In Excel, select the data to be included in the graph.
3. From the Insert menu, select Charts/Line drop down box.
4. Choose an appropriate chart layout (you may wish to try several).
5. From Chart Layouts on the top menu bar, choose a layout with the desired labels.
6. To label the X-axis, left click on the axis to obtain a box around the numbers, then right click.
7. Choose Select Data.
8. Choose Edit from the Horizontal Axis Labels.
9. Select the data to appear on the horizontal axis, then OK.

Excel offers an extensive help feature; click on the blue ?.