Week 2 Review Session Questions

Thursday, January 16th, 4 and 5pm, North Hall 1110

Questions that are not covered in week 2 may be discussed in the following week.

1. Consider the four expenditure components of GDP. Explain what is being measured by consumption (C), investment (I), government expenditures (G) and net exports (NX).

2. A Marketwatch article from May 30, 2018 was titled, "U.S. GDP revised lower for the first quarter on inventories." Explain how inventories changed in order for the GDP to be revised to a lower level.

3. Suppose that a simple economy produces only four goods: computers, beef, cars and tires. Assume that all the tires are used in the production of cars. Use the information in the following table to calculate nominal GDP for 2018.

Production and Price Statistics for 2018		
Product	Quantity	Price
Computers	100	50
Beef	100	5
Cars	20	100
Tires	80	10

4. The following table shows data relating the minimum number of days of vacation by workers (set by government law) and the GDP per capita.

Country	Minimum Days of Vacation by Law	Real GDP per Capita ($)
New Zealand	20	29,730
Italy	20	30,136
Belgium	20	37,883
France	30	35,548
United States	0	52,787
Spain	30	30,557
Germany	25	30,028
Portugal	22	23,385
Austria	25	42,409

Can we conclude anything about the well-being of the average worker in the United States from these data? What measures besides vacation days and real per capita GDP would you like to see in evaluating the well-being of workers?

5. Nominal GDP is not an accurate measure of changes in total production from year-to-year. How is the GDP measurement altered so that it is a more accurate measure of total production?

6. Use the data in the following table to calculate the GDP deflator for each year (values are in billions of dollars):

Year	Nominal GDP	Real GDP
2010	24,851	24,984
2011	25,922	25,621
2012	26,546	25,964
2013	27,977	26,410
2014	29,214	27,644

Calculate the GDP deflator and inflation rate in each year.

7. A prospector finds an uncut diamond in the ground. The prospector sells the uncut diamond to a cutter for $1000. The cutter extracts and cuts the diamond, then sells it to a polisher for $2500. After polishing the diamond, the polisher sells the diamond to a distributor for $3000. The distributor sells the diamond to a consumer for $5000.

A. What is the increase in GDP resulting from these transactions?

B. Assuming there are no intermediate goods beyond those described, what is the value added of each producer?

C. What is total value added in the process of selling this diamond? How does it compare to your answer in part (A)?

8. Suppose in a given year, someone buys a Ford automobile for $30,000. That same year, Ford produced the car in Michigan, using $10,000 in parts imported from Japan. However, the parts imported from Japan themselves contained $3,000 in components produced in the United States.

A. By how much does US GDP rise?

B. Using the expenditure approach, what is the change in each component (C, I, G and NX) of US GDP?

C. What is the change in Japan's GDP and each of its components?