Review question

1. The table below describes a variety of cases which can possibly affect US GDP. Please fill in the blanks.

Scenario	Component of GDP affected: C, I, G, X-IM, or NC (not counted)	Effect on GDP (increase, decrease, or no change)
1. A farmer purchases a new tractor.		
2. Businesses increase their current inventories.		
3. You spend $7 to attend a movie.		
4. Worried about consumer confidence, Ford purchases less sheet metal for cars.		
5. A retired man cashes his social security check from the government.		
6. A French company purchases a one-year membership to PartyPeople.com, a U.S.-based company.		
7. A person pays $450 a month to rent an apartment.		
8. Worried about a recession, people begin saving more money.		
9. The U.S. government hires more workers for constructing a bridge.		
10. Government closes school for the month of March.		

2. Suppose nominal GDP in 2012 increased by 7% (over its level in 2011). Based on this information, what happened to the rate of inflation (as measured by the GDP deflator) and real GDP between 2011 and 2012? Provide a full analysis given this information and holding everything else constant.

3. National income accounting deals with the aggregate measure of the outcome of economic activities. The most common measure of the aggregate production in an economy is Gross Domestic Product (GDP). In this problem consider a nation known as "Cocoland." The table below provides Cocoland's national income accounting. Use this data to answer the following questions.

Transfer Payments	$ 54
Interest Income	$ 186
Depreciation	$ 36
Wages	$ 67
Gross Private Investment	$ 124
Business Profits	$ 274
Indirect Business Taxes	$ 74
Rental Income	$ 75
Net Exports	$ 18
Net Foreign Factor Income	$ 12
Government Purchases	$ 156
Household Consumption	$ 304

a. Calculate the GDP using the expenditure approach
b. Calculate GDP using the income approach

4. Suppose you are provided with the following information about an economy comprised of just two firms, a shrimp farm that produces raw shrimp and a seafood restaurant:

SHRIMP FARM		SEAFOOD RESTAURANT	
Revenues (shrimp)		Revenues (fried shrimp)	
Sales to Households	$ 10,000	Sales to Household	$ 50,000
Sales to Foreigners	$ 10,000		
Sales to Seafood Restaurant	$ 10,000		
Expenses		Expenses	
Wages	$ 10,000	Wages	$ 15,000
		Shrimp	$ 10,000
Profits	$ 20,000	Profits	$ 25,000

a. Calculate GDP using the final goods approach. Show work.
b. Calculate GDP using the value-added approach. Show each step of your calculations.

c. Calculate GDP using the factor payment approach. Show each step of your calculations.

5. Suppose people consume 3 different goods. The following table shows the prices and quantities of each good consumed in 2006, 2007, and 2008. Express your answers in percentage terms to ***one*** place past the decimal.

Year	Price of Fish	Quantity of Fish	Price of Pork	Quantity of Pork	Price of Beef	Quantity of Beef
2006	$ 7/fish	400 fish	$ 8/pound	225 pounds	$ 10/pound	175 pounds
2007	$ 8/fish	550 fish	$ 7/pound	250 pounds	$ 12/pound	275 pounds
2008	$ 9/fish	900 fish	$ 6/pound	275 pounds	$ 15/pound	275 pounds

a. Calculate nominal GDP in each of the three years.
b. Calculate Real GDP in each of the three years, using 2006 as the base year
c. Calculate the GDP deflator for each of the three years.
d. Calculate the rate of inflation for 2007 and 2008 using the GDP deflator as your price index. Assume that 2006 is still the base year.

6.

Numerical Example (Homework #4)

Case 3: Open economy, with Government

$C = 80 + 0.4Y^d$

$I = 50 + 0.6Y$

$G = 30$

$T = 10 + 0.1Y$

$X = 40$

$M = 20 + 0.16Y$

Note $Y^d = Y - T$

1. Finds Aggregate expenditure function and equilibrium national income

2. Draw graph show equilibrium national income

3. If autonomous government spending increase 4 units, and autonomous tax increase 20 units, find the new level of equilibrium national income