



Unit 2 Test will be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 2 Learning Targets**

At the completion of this unit students will be able to:

* Describe the circular flow of goods, services, and payments in the macroeconomy
* Understand what is, and is not, included in the calculation of GDP
* Define full employment, inflation, and economic growth
* Know the difference between real and nominal values
* Evaluate data and derive a price index given that data
* Apply price indices in order indicate Real GDP
* Evaluate GDP, inflation, and unemployment as indicators of macroeconomic health
* Explain the impact of unanticipated inflation
* Define the types of unemployment and categorize examples according to the types of unemployment
* Identify the difference between full employment and the natural rate of unemployment

**SHOULD BE FILLED OUT/DEFINED BY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Key Terms to Define (and learn!)**

Product market

Factor market

Government transfer payments

Disposable income

Inventories

Investment Spending

Intermediate goods/services

Value added

Net exports

Chain-linking

Labor Force Participation rate

Discouraged workers

Underemployed

Real Wage / Real Income

Market basket

Price index

Producer Price index

GDP deflator

**Important Terms and Concepts (Gross Domestic Product)**

Complete after you have watched the videos on Gross Domestic Product

1. \_\_\_\_\_\_\_\_\_\_ Microeconomics

1. Period of expansion in an economy’s total output
2. Period of decline in an economy’s total output
3. Gross domestic product calculated at current price levels
4. Products purchased by their ultimate users
5. Study of behavior of an entire economy
6. Combining individual markets into a single, overall market
7. Gross domestic product calculated using prices from some agreed-upon base year
8. Products purchased for resale or for their use in producing other products
9. Sustained decrease in general price level
10. Sum of money values of all final goods and services produced in the domestic economy and sold on organized markets within the year
11. Study of individual decision-making units
12. Sustained increase in general price level
13. Output divided by populations

2. \_\_\_\_\_\_\_\_\_\_ Macroeconomics

3. \_\_\_\_\_\_\_\_\_\_ Aggregation

4. \_\_\_\_\_\_\_\_\_\_\_ Inflation

5. \_\_\_\_\_\_\_\_\_\_\_ Deflation

6. \_\_\_\_\_\_\_\_\_\_\_ Recession

7. \_\_\_\_\_\_\_\_\_\_\_ Gross Domestic Product

8. \_\_\_\_\_\_\_\_\_\_\_ Nominal GDP

9. \_\_\_\_\_\_\_\_\_\_\_ Real GDP

10. \_\_\_\_\_\_\_\_\_\_\_ Final Goods and Services

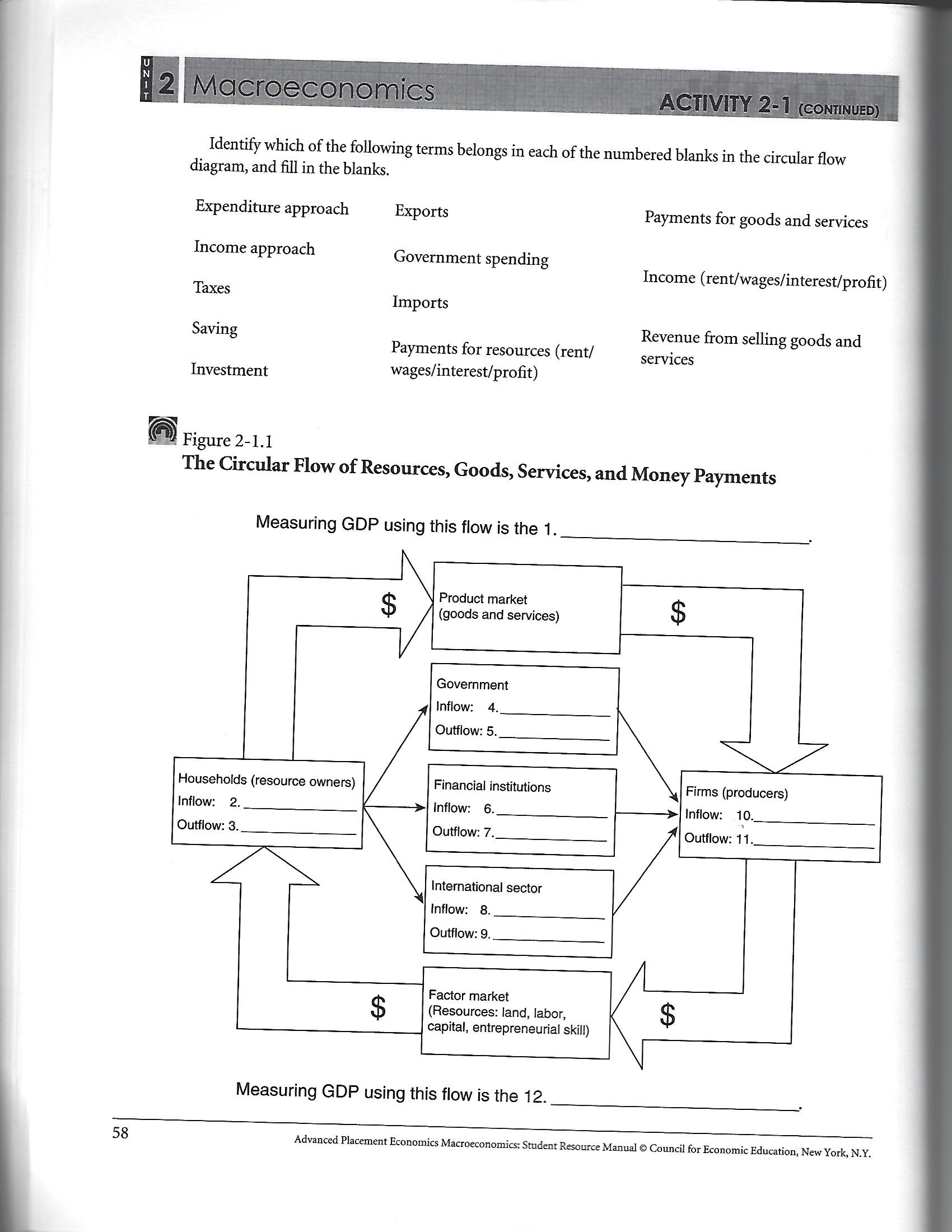
11. \_\_\_\_\_\_\_\_\_\_\_ Intermediate Goods

12. \_\_\_\_\_\_\_\_\_\_\_ GDP Per Capita

**The Circular Flow (money, goods, resources, and services)**

*Identify which of the following terms belongs in each of the numbered blanks in the circular flow diagram, and fill in the blanks.*

* Expenditure approach
* Exports
* Government spending
* Imports
* Income (W,I,R,P)
* Income approach
* Investment
* Payments for goods and services
* Payments for resources (W,I,R,P)
* Revenue from selling goods and services
* Saving
* Taxes

****

**GDP: Is it counted and where?**

*For each of the following items, write one of the following in the space provided:*

**C** if the item is counted as *consumption spending*

**I** if the item is counted as *investment spending*

**G** if the item is counted as *government spending*

**Nx** if the item is counted as *net exports*

**NC** if the item is *not counted* in GDP

\_\_\_\_\_\_\_\_\_\_\_ 1. You spend $10 to see a movie

\_\_\_\_\_\_\_\_\_\_\_ 2. A family pays a contractor $150,000 for a house he built for them this year

\_\_\_\_\_\_\_\_\_\_\_ 3. A family pays $75,000 for a house built three years ago

\_\_\_\_\_\_\_\_\_\_\_ 4. An accountant pays a tailor $175 to sew of suit for her

\_\_\_\_\_\_\_\_\_\_\_ 5. The government increases its defense expenditures by $1,000,000,000

\_\_\_\_\_\_\_\_\_\_\_ 6. The government makes a $300 Social Security payment to a retired person

\_\_\_\_\_\_\_\_\_\_\_ 7. You buy McDonald’s stock for $1000 in the stock market

\_\_\_\_\_\_\_\_\_\_\_ 8. At the end of a year, a flour-milling firm finds that its inventories of grand and flour are $10,000 higher than its inventories at the beginning of the year.

\_\_\_\_\_\_\_\_\_\_\_ 9. Parents work hard caring for their two children

\_\_\_\_\_\_\_\_\_\_\_ 10. Ford Motor Company buys new auto-making robots

\_\_\_\_\_\_\_\_\_\_\_ 11. You pay $800/month to rent an apartment

\_\_\_\_\_\_\_\_\_\_\_ 12. Consumer electronics corporation Apple, Inc. builds a new factory in the United States

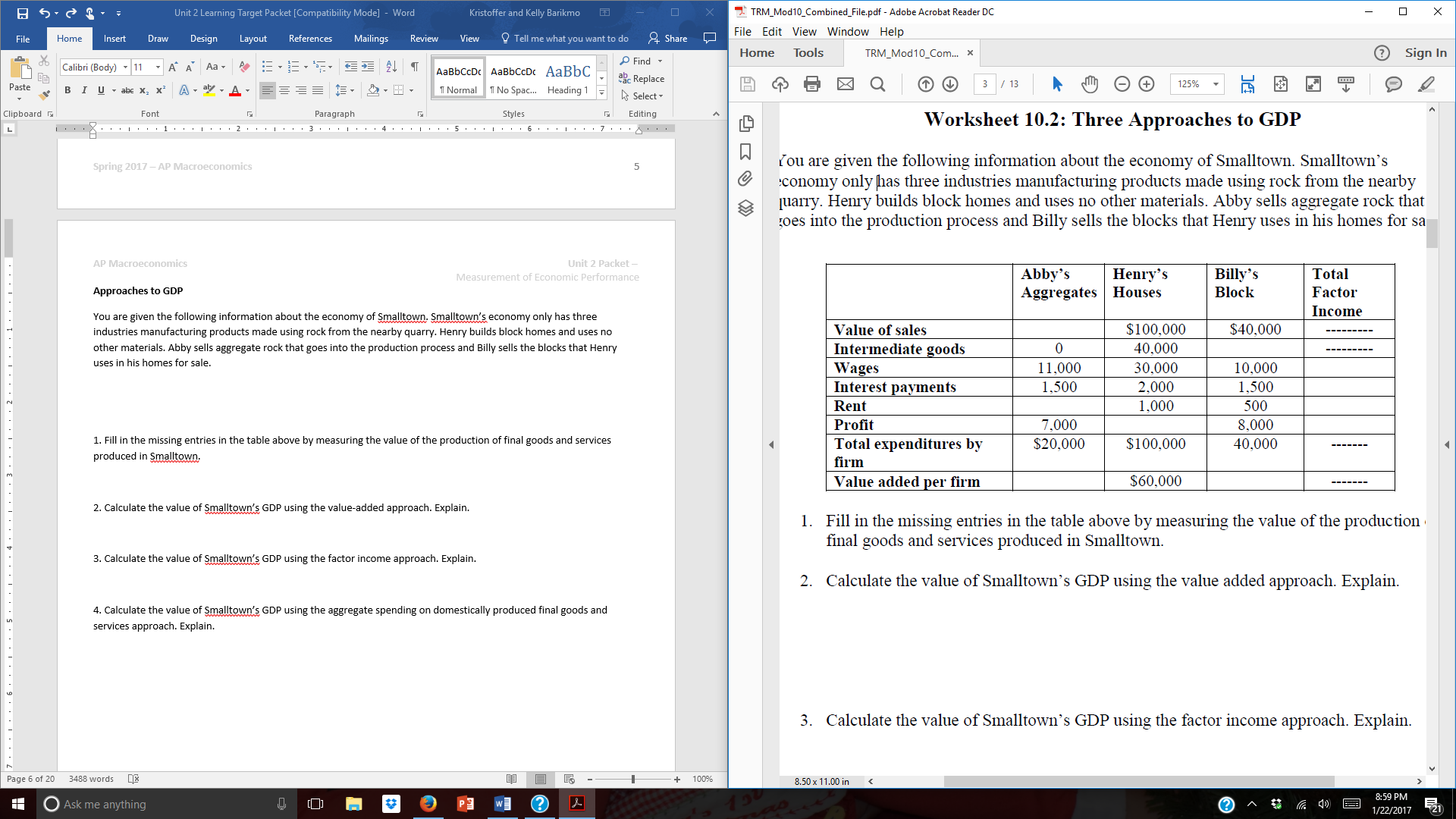
\_\_\_\_\_\_\_\_\_\_\_ 13. R.J. Reynolds buys control of Nabisco

\_\_\_\_\_\_\_\_\_\_\_ 14. You buy a new Toyota that was made in Japan

\_\_\_\_\_\_\_\_\_\_\_ 15. You pay tuition to attend college.

**Approaches to GDP**

You are given the following information about the economy of Smalltown. Smalltown’s economy only has three industries manufacturing products made using rock from the nearby quarry. Henry builds block homes and uses no other materials. Abby sells aggregate rock that goes into the production process and Billy sells the blocks that Henry uses in his homes for sale.



1. Fill in the missing entries in the table above by measuring the value of the production of final goods and services produced in Smalltown.

2. Calculate the value of Smalltown’s GDP using the value-added approach. Explain.

3. Calculate the value of Smalltown’s GDP using the factor income approach. Explain.

4. Calculate the value of Smalltown’s GDP using the aggregate spending on domestically produced final goods and services approach. Explain.

**Gross Domestic Product and National Accounting Methods**

*These problems are designed to give you practice in understanding alternative ways of measuring GDP.*

**Calculation of GDP**. This problem will give you a chance to calculate GDP using several different methods. You should get the same value for GDP with each method.

*Paradise Island produces coconuts and coconut pies, but nothing else. Some of the coconuts are consumed domestically, some are exported, and some are used to make pies. Some pies are consumed domestically and some are exported. All ingredients for making pies are imported except for coconuts. Labor is the only factor of production in Paradise Island. The government of Paradise Island purchases pies as part of a program for feeding the Island’s poorest residents. The government funds this program entirely through a tax on households, where all of the taxes collected go to pay for the pie-purchasing program. Because the country is small, the world price prevails in local markets.*

|  |  |
| --- | --- |
| Consider the following data: **2016 3rd Quarter** | |
| **Data from coconut factories** | |
| Total labor hours worked: | 200,000 hours |
| Coconut factory wage: | $6/hour |
| Total Coconuts Sold: | 240,000 coconuts |
| Price of Coconuts: | $5/coconut |
| **Data from Pie Factories** | |
| Total labor hours worked: | 75,000 hours |
| Pie factory wage: | $12/hour |
| Total pounds of non-coconut ingredient inputs: | 80,000 lbs. |
| Price of non-coconut ingredients: | $2.50/lb. |
| Total coconut inputs: | 60,000 coconuts |
| Total coconut pie sales: | 140,000 pies |
| Price of pies: | $10/pie |
| **Data from Households** | |
| Coconuts consumed: | 160,000 coconuts |
| Pies consumed: | 120,000 pies |
| **Government Data:** | |
| Pies purchased by government: | 10,000 pies |
| **Trade Data** | |

Pies exported 10,000 pies

Coconuts Exported 20,000 coconuts

Ingredients imported 80,000 lbs.

1. Calculate the GDP using the *factor income approach.* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Now use the *value added approach.* What is the total value added by the coconut factories? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. What is the total value added by the pie factories? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. What is the GDP? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Now we will use the *expenditure approach* to calculate GDP
   1. Find the total consumer spending \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Find the total government spending \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Find the total spending on export goods \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Find the total spending on import goods \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. Find the GDP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GDP in the Economy**

*1. Calculate the gross domestic product using these figures*.

Consumer spending = $1,000

GDP =

Investment spending = $200

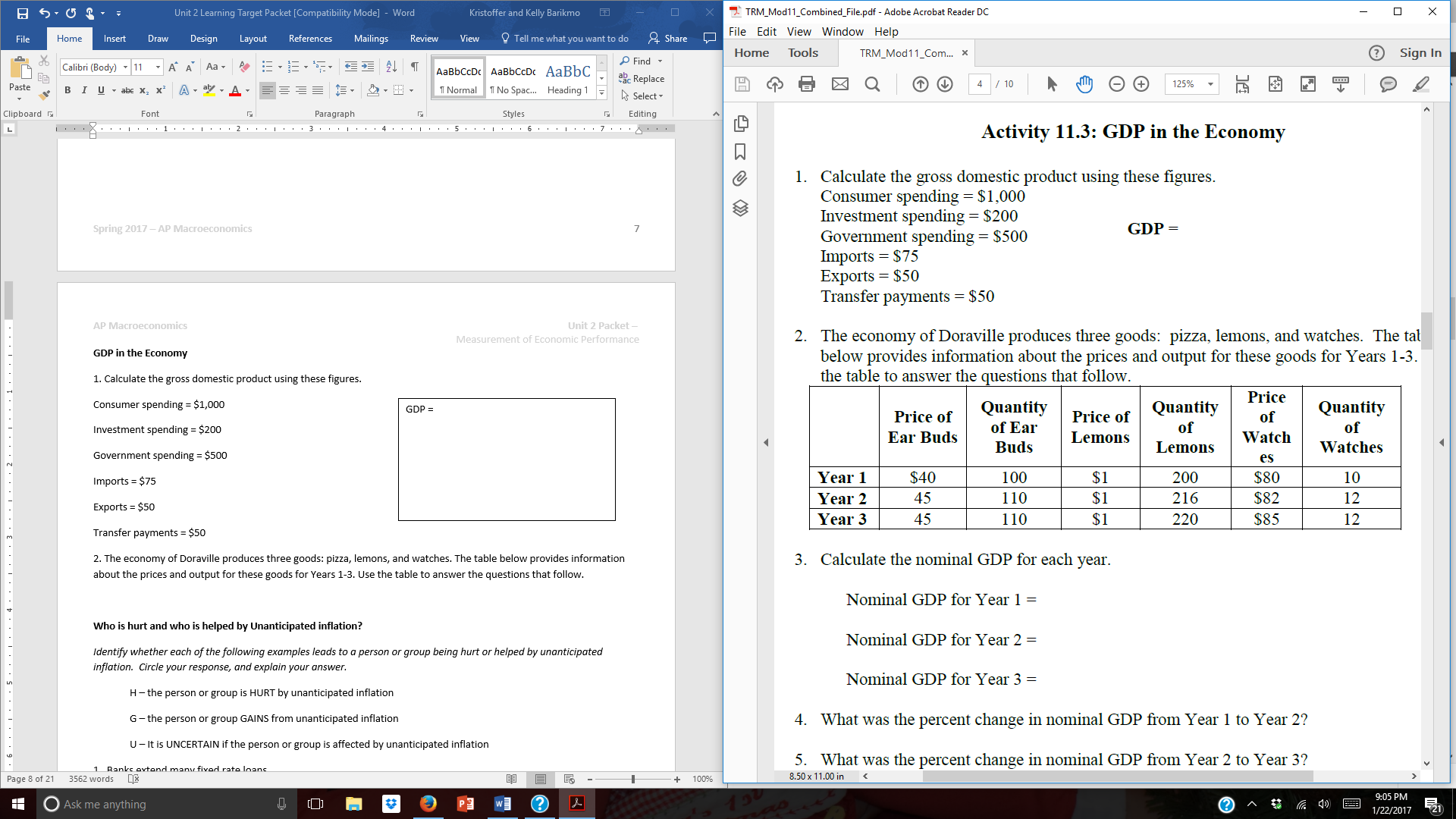
Government spending = $500

Imports = $75

Exports = $50

Transfer payments = $50

*2. The economy of Doraville produces three goods: pizza, lemons, and watches. The table below provides information about the prices and output for these goods for Years 1-3. Use the table to answer the questions that follow.*



*3. Calculate the nominal GDP for each year.*

Nominal GDP for Year 1 =

Nominal GDP for Year 2 =

Nominal GDP for Year 3 =

*4. What was the percent change in nominal GDP from Year 1 to Year 2?*

*5. What was the percent change in nominal GDP from Year 2 to Year 3?*

*6. Using Year 1 as the base year, calculate the real GDP for each year.*

**Real GDP for Year 1 = Real GDP for Year 2 = Real GDP for Year 3 =**

**Helped or Hurt?**

**For each of the following scenarios, determine if the individual is helped or hurt by inflation. Explain each answer.**

1. Jack retired five years ago and now lives on a fixed-income annuity and a small savings account that pays him 1% interest on the balance. The current inflation rate is 1.7%.

2. Jill has worked at her current position without a raise for 4 years. Because inflation has risen 5% over the course of the 4 years, she has struggled to pay day-to-day living expenses and her house payment. She asked her employer for a raise and he gave her a 6% raise because she is such a good worker.

3. Peter has been saving his money to buy his girlfriend an engagement ring. He decided to give the money to his mother to hold for him so he wouldn’t spend it rather than put it in a savings account at the bank. During the time he was saving, the price of the ring he picked out increased by 10%.

4. Wendy manages a bank in the local area. The previous manager made several fixed-rate loans to customers at low interest rates to bring in new depositors. Inflation is now rising at 3% per year.

5. Luke works for a building contractor and is a member of the local ironworkers union. The contractor is currently building 5 skyscrapers in the Chicago area. His union just negotiated a new 5-year contract that includes small annual raises and a cost of living adjustment (COLA).

6. Leia just read that the national debt owed by the federal government is at an all-time high. (Explain impact on federal government.)

7. Han works at the local tax agency. The county commissioners just voted to sell license tags at the same rate for the next 5 years. (Explain impact on county government.)

8. Lando signed a 4-year fixed rate lease for the condo he is going to live in while he attends college.

**Who is hurt and who is helped by Unanticipated inflation?**

*Identify whether each of the following examples leads to a person or group being hurt or helped by unanticipated inflation. Circle your response, and explain your answer.*

H – the person or group is HURT by unanticipated inflation

G – the person or group GAINS from unanticipated inflation

U – It is UNCERTAIN if the person or group is affected by unanticipated inflation

1. Banks extend many fixed rate loans.

H G U

Explain:

2. A farmer buys machinery with a fixed-rate loan to be repaid over a ten-year period.

H G U

Explain:

3. Your family buys a new home with an adjustable-rate mortgage.

H G U

Explain:

4. Your savings from your summer job are in a savings account paying a fixed rate of interest.

H G U

Explain:

5. A widow lives entirely on income from fixed-rate corporate bonds

H G U

Explain:

6. A retired couple lives entirely on income from a fixed-rate pension the woman receives from her former employer.

H G U

Explain:

7. A retired man relies entirely on income from Social Security.

H G U

Explain:

8. A retired bank official lives entirely on income from stock dividends

H G U

Explain:

9. The federal government has an $18 trillion debt.

H G U

Explain:

10. A firm signs a contract to provide maintenance services at a fixed rate for the next five years

H G U

Explain:

11. A state government received revenue mainly from an income tax

H G U

Explain:

12. A local government receives revenue mainly from fixed-rate license fees charged to businesses

H G U

Explain:

13. Your friend rents an apartment with a three year lease.

H G U

Explain:

14. A bank has loaned millions of dollars for home mortgages at a fixed rate of interest.

H G U

Explain:

15. Parents are putting savings for their child’s college education in a bank savings account.

H G U

Explain:

**The Costs of Inflation**

Unanticipated inflation…

SHOE LEATHER COSTS

MENU COSTS

UNIT OF ACCOUNT COSTS

|  |  |  |  |
| --- | --- | --- | --- |
| **SITUATION** | **SHOE LEATHER COSTS** | **MENU COSTS** | **UNIT OF ACCOUNT COSTS** |
| 1. Your favorite local restaurant raises its prices and has to print new advertisements |  |  |  |
| 1. Workers in Germany in 1922 are paid and shop three times a day due to hyperinflation. |  |  |  |
| 1. You have to change your automatic bill payment in your online banking account because the rent for your apartment went up |  |  |  |
| 1. You remember when the price of gasoline was $1.25 per gallon |  |  |  |
| 1. You work at your local grocery store and place new higher price stickers on the store’s shelves |  |  |  |
| 1. Your weekly grocery bill increases, but the amount of groceries you purchase does not. |  |  |  |

**Price Indices and Real versus Nominal Values**

Fill in the blanks of this chart below…

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Quantity bought in base year | Unit price in base year | Spending in base year | Unit price in Year 1 | Spending in Year 1 | Unit Price in Year 2 | Spending in Year 2 |
| Whole Pizza | 30 | $5 |  | $7 |  | $9 |  |
| Flash Drive | 40 | $6 |  | $5 |  | $4 |  |
| Six-pack of soda | 60 | $1.50 |  | $2 |  | $2.50 |  |
| Total | -- |  |  |  |  |  |  |

1. How much would $100 of goods and services purchased in the base year cost in year 1?
2. What was the percentage increase in prices in this case?
3. What is the percentage increase in prices from the base year to Year 2?

**Constructing a Price Index**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Year 1 | | Year 2 | | Year 3 | |
| Basic Market basket item | No. of units | Price per unit | Cost of Market Basket | Price per unit | Cost of market basket | Price per unit | Cost of market basket |
| Cheese | 2 lbs. | $1.75 | $3.50 | $1.50 | $3.00 | $1.50 | $3.00 |
| Blue Jeans | 2 pair | $12 | $24 | $15.50 | $31 | $20 | $40 |
| Gasoline | 10 gals. | $1.25 | $12.50 | $1.60 | $16 | $2.70 | $27 |
| Total | -- | -- | $40 | -- | $50 | -- | $70 |

4. If Year 1 is selected as the base year, calculate the price index for each year. Be ready to explain your work…

Year 1 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Year 2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Year 3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. These price indices indicate that there was a 25 percent increate in prices between Year 1 and Year 2.

What is the percentage increase between Year 1 and Year 3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the percentage increase between Year 2 and Year 3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Nominal and Real GDP**

Nominal GDP Price Index Population

Year 3 $5000 125 11

Year 4 $6600 150 12

1. What is the real GDP in Year 3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What is the real GDP in Year 4? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What is the real GDP per capita in Year 3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. What is the real GDP per capita in Year 4? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. What is the rate of real output growth between Years 3 and 4? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. What is the rate of real growth per capita between Years 3 and 4? (Hint: Use per capita data in the output growth rate formula.)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Important Terms and Concepts (Employment, Unemployment, and Labor Force Productivity)**

Complete after you have watched the videos on Unemployment Calculations

1. \_\_\_\_\_\_\_\_\_\_ Inputs

1. labor, machinery, building, and other resources used to produce output
2. number of people holding or seeking jobs
3. Output per hour of labor input
4. Government transfer payments to eligible workers if unemployed
5. Percentage of labor force unemployed
6. Interest payments, in percentage terms, measured in dollars
7. Total output divided by population
8. Unemployed people who cease looking for work, believing that no jobs are available
9. Unemployment attributable to decline in economy’s total production
10. Unemployment due to normal workings of the labor market
11. Government policies to promote economic growth
12. Interest payment, in percentage terms, measured in terms of purchasing power
13. Volume of goods and services that money wage will buy
14. Unemployment due to changes in the nature of the economy
15. Price of an item in terms of some other item
16. Volume of goods and services that a sum of money will buy
17. Level of real output attainable if all resources were fully employed
18. Increase in total output
19. Goods and services that firms produce
20. Legal maximum interest rate
21. Relationship between inputs and outputs

2. \_\_\_\_\_\_\_\_\_\_ Outputs

3. \_\_\_\_\_\_\_\_\_\_ Economic growth

4. \_\_\_\_\_\_\_\_\_\_\_ Growth Policy

5. \_\_\_\_\_\_\_\_\_\_\_ Labor Productivity

6. \_\_\_\_\_\_\_\_\_\_\_ Potential GDP

7. \_\_\_\_\_\_\_\_\_\_\_ Labor Force

8. \_\_\_\_\_\_\_\_\_\_\_ Production function

9. \_\_\_\_\_\_\_\_\_\_\_ Unemployment Rate

10. \_\_\_\_\_\_\_\_\_\_\_ Discouraged workers

11. \_\_\_\_\_\_\_\_\_\_\_ Frictional unemployment

12. \_\_\_\_\_\_\_\_\_\_\_ Structural unemployment

13. \_\_\_\_\_\_\_\_\_\_\_ Cyclical unemployment

14. \_\_\_\_\_\_\_\_\_\_\_ Unemployment insurance

15. \_\_\_\_\_\_\_\_\_\_\_ Purchasing Power

16. \_\_\_\_\_\_\_\_\_\_\_ Real Wage

17. \_\_\_\_\_\_\_\_\_\_\_ Relative Prices

18. \_\_\_\_\_\_\_\_\_\_\_ Real rate of interest

19. \_\_\_\_\_\_\_\_\_\_\_ Nominal rate of interest

**Civilian Employment**

*Fill in the last three columns of this chart using the calculations for the “unemployment rate” and “labor force participation rate”*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Civilian non-institutional population age 16 and over | Civilian Labor Force | | | UR | LFPR |
| Employed | Unemployed | Total |
| 1970 | 117 | 66 | 4 |  |  |  |
| 1980 | 137 | 79 | 4 |  |  |  |
| 1990 | 168 | 99 | 8 |  |  |  |
| 2000 | 188 | 117 | 7 |  |  |  |
| 2010 | 209 | 135 | 6 |  |  |  |

*For each of the following situations, put the appropriate letter before each example.*

F – if it is an example of *frictional*

C – if it is an example of *cyclical*

S – if it is an example of *structural*

N – if it is an example of someone who is NOT employed

\_\_\_\_\_ 1. A computer programmer is laid off because of a recession

\_\_\_\_\_ 2. A literary editor leaves her job in NYC to look for a job in San Francisco

\_\_\_\_\_ 3. An unemployed college graduate is looking for his first job.

\_\_\_\_\_ 4. Advances in technology make the assembly-line workers job obsolete

\_\_\_\_\_ 5. Slumping sales lead to the cashier being laid off

\_\_\_\_\_ 6. An individual refuses to work for minimum wage

\_\_\_\_\_ 7. A high school graduate lacks the skills necessary for a particular job

\_\_\_\_\_ 8. Workers are laid off when the local manufacturing plant closes because the product made there isn’t selling during a recession

\_\_\_\_\_ 9. A skilled glass blower becomes unemployed when a new machine does her job faster.

\_\_\_\_\_ 10. An individual has been laid off during a recession and has been looking for work unsuccessfully for so long that he has finally given up actively seeking a job.

\_\_\_\_\_ 11. A college graduate works at a job that does not require a college education

**Test your understanding of macroeconomic indicators…**

*Answer the questions and briefly explain your answers.*

1. The unemployment rate and employment both go up. Ellen says that it is not possible for both to rise at the same time. Is Ellen correct or incorrect? Why?
2. True, false, or uncertain, and explain why? “Gross domestic product measures the amount of wealth in the economy.”
3. True, false, or uncertain, and explain why? “A decrease in gross domestic product must reduce a person’s standard of living.”
4. True, false, or uncertain, and explain why? “If nominal GDP increases by 5 percent and the price level increases by 7 percent, real GDP has decreased.”
5. True, false, or uncertain, and explain why? “In preparing an index of prices, it is important that all commodities entering the index be given equal weight.”
6. True, false, or uncertain, and explain why? “Frictional AND structural unemployment are two words for the same thing.”
7. Why does unanticipated inflation help borrowers and hurt lenders?
8. True, false, or uncertain, and explain why? “Inflation always increases when unemployment decreases.”
9. True, false, or uncertain, and explain why? “If the economy is at full employment, the unemployment rate is zero.”
10. True, false, or uncertain, and explain why? “Seasonal unemployment is a continual worry because some people are out of work on a regular basis.”

***Free Response question practice…***

Things to note on writing the FRQ’s for the AP Macroeconomics exam

|  |  |
| --- | --- |
| JTFJ | “Just the Facts Jack/Jane” … don’t write a thesis, intro, or 5 paragraph essay. This is economics and it requires a concise answer. |
| ADQ | “Answer the D--- Question!”… Much like above, don’t go into a deep analysis if it is not asked for. Don’t answer other questions in the same question. Don’t use this as an opportunity to show off what you know. If you don’t know the answer or how to get to the answer don’t spend time explaining the concepts “around” the answer. They just want an answer…don’t B--- S--- your way on the question. |
| Multiple parts | Questions are in multiple parts and points are awarded for each part independently. You should attempt to answer ALL parts. Even if a later answer depends on a previous answer you might still get credit even if the previous answer was wrong. If you follow the logic they might give you points.  Use the same outline or letters from the question as written. It helps the faculty scorer IMMENSELY! |
| SICE | **Show** means to diagram or graph a macroeconomic effect. It is possible to get partial points, so always take a shot at these and be sure to label them fastidiously.  **Identify** usually means just that: Identify the result of something happening. A short, direct response is expected (and desired). Example: 'Unemployment will rise.' If the question does not explicitly ask for explanation, don't bother writing one.  **Calculate** usually will mean to apply a formula that you (hopefully) have mastered with practice. Keep a running page in your notebook of the formulas we use… there will be A LOT of them.  **Explain** should leap off the page when you see it in an FRQ. That means you are expected to both indicate what will happen and offer an explanation as to why or how it happens. |
| Master the graphs / models | You should always be thinking of the models when answering the questions in both the MC and FRQ sections. Know how to label ALL of the parts and show your logic clearly on the graph. Sometimes an answer on the FRQ will not require any words! A well constructed and labeled graph will do the trick. |

**Interpreting Real Gross Domestic Product FRQ Due in class on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. The economy of Britannica produces three goods: Computers, DVDs, and pizza. The accompanying table shows the prices and output of the three goods for the years 2008, 2009, and 2010.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Computers | | DVDs | | Pizza | |
| Year | Price | Qty | Price | Qty | Price | Qty |
| 2008 | $900 | 10 | $10 | 100 | $15 | 2 |
| 2009 | 1000 | 10.5 | 12 | 105 | 16 | 2 |
| 2010 | 1050 | 12 | 14 | 110 | 17 | 3 |

1. What is the percent change in computer production from 2008 to 2009?
2. What is the percent change in the price of pizza from 2009 to 2010?
3. Calculate nominal GDP in Britannica for 2008.
4. Calculate real GDP in Britannica for 2008 using 2008 as the base year.
5. Calculate real GDP in Britannica for 2010 using 2008 as the base year.

**Inflation and Net costs FRQ Due in class on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. In the following examples, is inflation creating winners and losers at no net cost to the economy or is it imposing a net cost on the economy? Explain. If inflation is imposing a net cost on the economy, which type of cost is involved?

a. When inflation is expected to be high, workers get paid more frequently and make more trips to the bank.

b. Lanwei is reimbursed by her company for her work-related travel expenses. Sometimes, however, the company takes a long time to reimburse her. So when inflation is high, she is less willing to travel for her job.

c. Hector Homeowner has a mortgage loan that he took out five years ago with a fixed 6% nominal interest rate. Over the years, the inflation rate has crept up unexpectedly to its present level of 7%.

d. In response to unexpectedly high inflation, the manager of Cozy Cottages of Cape Cod must reprint and resend expensive color brochures correcting the price of rentals this season.

2. You borrow $1000 for one year at 5% interest to buy a coach. Although you did not anticipate any inflation, there is unexpected inflation of 4% over the life of your loan.

a. What is the real interest rate on your loan?

b. Explain how you gained from the inflation.

c. Who lost as a result of the situation described? Explain.

**The measurement and calculation of inflation FRQ Due in class on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Suppose the year 2000 is the base year for a price index. Between 2000 and 2020 prices double and at the same point your nominal income increases from $40,000 to $80,000.

1. What is the value of the price index in 2000?
2. What is the value of the price index in 2020?
3. What is the percentage increase in your nominal income between 2000 and 2020?
4. What has happened to your real income between 2000 and 2020? Explain.

2. Using 2000 as the base year, calculate the price index for each year.

a.

|  |  |  |
| --- | --- | --- |
| Year | Price Index (1999 = 100) | New Price index (2000 = 100) |
| 1998 | 88 |  |
| 1999 | 100 |  |
| 2000 | 120 |  |
| 2001 | 132 |  |
| 2002 | 140 |  |

b. If 2001 nominal GDP were $400 billion and 2002 nominal GDP were $420 billion, what was the growth rate for the economy from 2001 to 2002?