

**PRINCIPLES OF MACROECONOMICS**

Economics 105 / Section 4 / Binder

ASSIGNMENT #1: Do questions 1, 5 & 10 under Problems and Applications on pages 111-112 in the Mankiw text. DUE, with weekly work record, on Sept. 4

**CLASS EXERCISE #2:**

**GROSS DOMESTIC PRODUCT (GDP)**

1. As you (now) know, GDP can be decomposed into the following constituent parts:

$$Y = C + I + G + NX$$

Note what each letter stands for, and give an example:

Symbol	Meaning	Example
Y		-----Not applicable-----
C		
I		
G		
NX		

2. Identify to which constituent part(s) of GDP (if any) the following items belong, and add your own items at the end:

	C	I	G	NX	Not counted in GDP
Intel expands its Rio Rancho plant					
Your grandmother receives her social security check					
Your grandmother buys you a sweater with the money from her social security check					
UNM pays a work study student to work in the library					
UNM pays the tuition of entering freshmen who qualify for the Bridge scholarship					
You buy \$15 worth of gasoline to fill your tank					
You buy a \$30 couch at a yard sale					
Your room-mate buys a pair of Italian shoes					
You buy 5 shares of Microsoft					
The government sends you a tax refund check for \$300.					

3. GDP includes cleaning your house if you pay the Mini-Maids to do it, but not if you do it yourself. Explain how this leads to an underestimate of GDP. Why would this underestimate create relatively greater error in measuring the GDP in a country where the labor force participation of women is especially low?

4. The following table gives GDP components for the United States in the year 2000.

Item	Amount in billions of dollars	Percentage of GDP
C	6,759	67.8
I	1,834	18.4
G	1,743	17.5
NX	-370	-3.7
GDP	9,966	100.0

a) Which component contributes the most to GDP? In light of your answer, consider why consumer confidence is an important indicator of the health of the economy.

b) Explain why net exports (NX) can be negative. What does the negative number tell us about our purchases of imports relative to purchases of our exports by foreigners?

c) Does the Government play a large role in the economy? Justify your answer.

5. The following table gives current prices and quantities produced over three years for a fictitious economy that produces only pencils and paper.

	Year	Pencils					Paper					GDP = Total Value	GDP deflator
		Price	x	Am t		Value	Price	x	Am t		Value		
(a)	1999	1.00	x	100			5.00	x	50				
(b)			x					x					
(c)	2000	1.50	x	150			6.00	x	80				
(d)			x					x					
(e)	2001	3.00	x	200			8.00	x	100				
(f)			x					x					

a) Calculate nominal GDP on lines a, c and e.

b) Calculate real GDP on lines b, d and f. Use 1999 as the base year.

c) Calculate the GDP deflator (nominal/real)x100 for each year on lines b, d and f.

d) What can you say about inflation in 2001?

6. This exercise shows that nominal GDP can still rise, even in a recession. Calculate nominal and real GDP and the GDP deflator as in #5 above.

	Year	Pencils					Paper					GDP = Total Value	GDP deflator
		Price	x	Am t		Value	Price	x	Am t		Value		
(a)	2000	1.50	x	150			6.00	x	80				
(b)			x					x					
(c)	2001	3.00	x	100			8.00	x	80				
(d)			x					x					

