

Chapter 5

Homework Assignment

1. Determine whether each of the following would or would not be included in the calculation of the current year's GDP. If it should not be included, explain why.
 - a. The purchase of a 1990 Ford Bronco
 - b. A purchase of a share of IBM stock.
 - c. Steel purchased by General Motors.
 - d. A dry cleaning bill.
 - e. The money you saved by doing your own laundry rather than using a dry cleaning service.
 - f. \$25 paid to a neighborhood kid to mow your lawn.
 - g. \$25 if you mow your lawn yourself.
 - h. Money used to purchase marijuana.

2. Given the following information for the fictitious "Alpha," calculate (a) the unemployment rate and (b) the labor force participation rate.

Population = 1 million

Labor force = 600,000

Number Employed = 570,000

3. Here is some data for the economy of the fictitious country "Alpha." Calculate Alpha's GDP. Explain why each item was or was not included in GDP.

a. Consumption expenditures	1000
b. Exports	125
c. Government purchases of goods and services	300
d. Construction of new homes and apartments	125
e. Sales of existing homes and apartments	320
f. Imports	90
g. Beginning-of-year inventory stocks	140
h. End of year inventory stocks	160
i. Business fixed investments	250
j. Government payments to retirees	160
k. Household purchases of durable goods	265

Key

- 1.a. No - it was produced in 1990, not the current year.
 - a. No - stock represents ownership, not production.

- b. No - it is an intermediate good.
- c. Yes.
- d. No - there was no market transaction.
- e. Yes.
- f. No - there was no market transaction
- g. No - illegal production is not included in GDP calculations.

2.a. Unemployment rate = $30,000/1,000,000 = .03$ or 3%

b. LFPR = $600,000/1,000,000 = .60$ or 60%

3. $GDP = C + I + G + NX$

- a. included as part of C
- b. included as part of NX
- c. included as part of G
- d. included as part of I
- e. not included - not produced during the period
- f. included as part of NX
- g. included as part of calculating I
- h. included as part of calculating I
- i. included as part of I
- j. not included - not a payment for a good or service
- k. included as part of C

$$\begin{aligned}
 GDP &= (1000 + 265) + (250 + [160 - 140] + 125) + (300) + (125 - 90) \\
 &= 1265 + 395 + 300 + 35 \\
 &= 1995
 \end{aligned}$$