# AP Macroeconomics <br> Unit 2, Objectives 2-4 <br> Gross Domestic Product (Chapter 23) 

Directions: Answer the questions below in your notebook.

1. Explain why each of the following transactions is either included or excluded in calculating GDP.
a) A mechanic fixes his own car.
b) A barber earns income for cutting hair.
c) A retired person receives a Social Security check.
d) A car manufacturer buys tires for its cars.
e) A family buys a new refrigerator.
2. What components of GDP (if any) would each of the following transactions affect? Explain.
a) You pay $\$ 300$ a month to rent an apartment.
b) A neighbor buys a new Toyota that was made in Japan.
c) A family pays $\$ 150,000$ for a house built three years ago.
d) A stockbroker is paid commissions on a large purchase.
e) A student receives a government scholarship check.
3. Copy and complete the table below, using 2012 as a base year.

| Year | Price of <br> Peas | Quantity <br> of Peas | Price of <br> Carrots | Quantity <br> of Carrots | Nominal <br> GDP | Real GDP |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2012 | $\$ 1$ | 100 | $\$ 1$ | 200 |  |  |
| 2013 | $\$ 1.50$ | 200 | $\$ 2$ | 250 |  |  |
| 2014 | $\$ 2$ | 250 | $\$ 2$ | 300 |  |  |

a) Explain why the real and nominal GDP are the same in 2012. Why is nominal so much greater in 2014?
b) Calculate the GDP deflator for each year. What is the rate of inflation for 2013 and 2014?

