

**Introduction to Macroeconomics  
Practice #2**

**Multiple Choices**

1. Which of the following statistics is the best single measure of an economy's well-being?
  - a. unemployment rate
  - b. inflation rate
  - c. **gross domestic product**
  - d. trade deficit
2. What does the simple circular-flow diagram illustrate?
  - a. **that expenditure generates income so that income and the value of production are equal**
  - b. that the economy's income exceeds its expenditure
  - c. that the expenditure of an economy exceeds its income
  - d. that money "flows" from households to firms and not the other way around
3. Which of the following is the correct definition of GDP?
  - a. the market value of all goods produced within a country
  - b. the market value of all final goods and services produced by the citizens of a country
  - c. the market value of all final goods and services consumed within a country over a number of years
  - d. **the market value of all final goods and services produced within a country in a given period of time**
4. Which of the following is NOT included in GDP?
  - a. **unpaid cleaning and maintenance of houses**
  - b. services such as those provided by lawyers and hairstylists
  - c. final goods that are produced but not sold by the end of the year
  - d. production of foreign citizens living in Canada
5. Over the past few decades, Canadians have chosen to cook less at home and eat more at restaurants. How has this practice affected GDP?
  - a. **It has increased measured GDP.**
  - b. It has reduced measured GDP.
  - c. It has not affected measured GDP.
  - d. It has had an ambiguous effect on GDP.
6. How are intermediate goods accounted for when calculating GDP?
  - a. The value of all intermediate goods is included in GDP.
  - b. The value of intermediate goods is included in GDP only if they were produced in the previous year.
  - c. The value of intermediate goods is included in GDP only if they are purchased by firms rather than households.
  - d. **The value of intermediate goods is not included in GDP unless they are part of inventory.**
7. Which of the following is counted in Canadian GDP?
  - a. goods and services produced by Canadian citizens working in the U.S.
  - b. American intermediate goods used in the production of Canadian final goods
  - c. **Canadian final goods and services purchased by the American government**
  - d. American final goods and services purchased by the Canadian government
8. In computing GDP, what is investment?
  - a. spending on stocks, bonds, and other financial assets
  - b. spending on real estate and financial assets
  - c. **spending on new capital equipment, inventories, and structures, including new housing**
  - d. spending on capital equipment, inventories, and structures, excluding household purchases of new housing
9. A Canadian tourist buys a \$75 handbag in Italy. What happens to Canadian imports/exports and GDP?
  - a. Canadian imports increase by \$75, and Canadian GDP increases by \$75.
  - b. **Canadian imports increase by \$75, but Canadian GDP is unaffected.**
  - c. Canadian imports and Canadian GDP are unaffected.
  - d. Canadian exports increase by \$75, and Canadian GDP increases by \$75.

10. In a given year, an economy has consumption of \$4000, investment of \$2000, government purchases of \$1500, exports of \$500, imports of \$600, taxes of \$1200, transfer payments of \$400, and depreciation of \$300. What is the GDP?
- \$6400
  - \$7400**
  - \$7600
  - \$8900
11. What would be the cause of a 2% increase in nominal GDP?
- a 1% increase in prices of and a 3% decrease in output
  - a 1% decrease in prices and a 1% increase in output
  - a 1% increase in prices and a 1% increase in output**
  - a 3% increase in prices and a 1% increase in output
12. What is the difference between nominal and real GDP?
- Nominal GDP values production at current prices, while real GDP values production at constant prices.**
  - Nominal GDP values production at constant prices, while real GDP values production at current prices.
  - Nominal GDP values production at market prices, while real GDP values production at the cost of the resources used in the production process.
  - Nominal GDP consistently underestimates the value of production, while real GDP consistently overestimates the value of production.
13. Suppose an economy produces only wheat and rice. Last year, 20 bushels of wheat are sold at \$4 per bushel, and 10 bushels of rice are sold at \$2 per bushel. If the price of wheat was \$2 per bushel and the price of rice was \$1 per bushel in the base year, what can we conclude?
- Nominal GDP is \$100, real GDP is \$50, and the GDP deflator is 50.
  - Nominal GDP is \$100, real GDP is \$50, and the GDP deflator is 200.**
  - Nominal GDP is \$50, real GDP is \$100, and the GDP deflator is 200.
  - Nominal GDP is \$50, real GDP is \$100, and the GDP deflator is 50.
14. Many things that society values, such as good health, high-quality education, enjoyable recreation opportunities, and desirable moral attributes of the population, are NOT measured as part of GDP. According to most economists, why is GDP a useful measure of society's well-being?
- It has been measured for many years and changing this measure would create confusion.
  - Providing these other attributes is the responsibility of government.
  - It measures a nation's ability to produce the things that contribute to well-being.**
  - These other values cannot actually be measured.

**Table 5-5**

Country	Nominal GDP	Population
A	\$4 800 000 million	127 million
B	\$240 000 million	7.2 million
C	\$9 800 000 million	280 million

15. Refer to Table 5-5. On the basis of the information in the table, which list below contains the correct ordering of GDP per person (from highest to lowest)?
- A, B, C
  - A, C, B**
  - C, B, A
  - C, A, B
16. If there is no trade, which of the following is most likely?
- A country is better off because it will become self-sufficient.
  - A country's production possibilities frontier is also its consumption possibilities frontier.**
  - A country can still benefit from international specialization.
  - A country has more product variety available.

17. If there is trade, which of the following is most likely?
- A country is worse off because it becomes dependent on other countries.
  - A country will produce a greater variety of goods and services to trade.
  - A country's consumption possibilities frontier can be outside its production possibilities frontier.
  - A country will experience a lower unemployment rate.

### Short Answers

1. A flour mill produces \$1000 worth of flour, of which \$700 goes to a bakery and \$300 to consumers. A water supplier produces \$300 worth of water, of which \$200 goes to the bakery and \$100 to consumers. The bakery produces \$1500 worth of bread and sells all of it to consumers. The three companies pay wages as follows: the mill pays \$400, the water supplier pays \$200, and the bakery pays \$200. There are no other costs of production.

- Calculate GDP based on the value of production.
- Calculate profits to the owners of each of the three companies (profit = revenue minus costs).
- Calculate GDP based on income.

ANS:

- GDP is the value of all final goods and services. Final goods are \$300 worth of flour, \$100 water, and \$1500 bread.  
 $GDP = 300 + 100 + 1500 = \$1900$
- Profits are as follows: the mill,  $1000 - 400 = \$600$ ; the water supplier,  $300 - 200 = \$100$ , and the bakery  $1500 - 700 - 200 - 200 = \$400$
- GDP is also the sum of all incomes in the economy:  $income = profits + wages = 600 + 100 + 400 + 400 + 200 + 200 = \$1900$ . This result must be the same as calculated before.

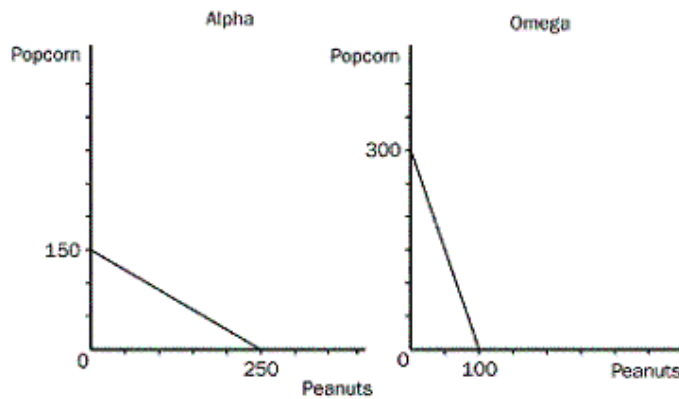
2. Alcestis and her family are the only inhabitants of Elafonisos, a small island off the coast of Greece. She only produces fresh fish, which she can sell to clients from nearby islands for 2 euros per kilo. Last year, Alcestis caught 800 kg of fish; she consumed 50 kg and sold the remaining 750 kg for €1500. She used €1000 to buy food and clothing, and she used the remaining €500 for a new fishing boat that she bought from another island. Calculate the following for Elafonisos:

- GDP, as the value of production
- Consumption
- Investment
- Exports
- Imports
- Net Exports
- GDP, as total expenditure

ANS

- $GDP = 800 \times 2 = €1,600$
- $Consumption = 50 \times €2 + €1000 = €1100$
- $Investment = €500$
- $Exports = 750 \times 2 = €1500$
- $Imports = 1000 + 500 = €1500$
- $Net Exports = 0$
- $GDP = C + I + G + NX = 1100 + 500 + 0 + 0 = €1600$

3. The only two countries in the world, Alpha and Omega, face the following production possibilities frontiers.



- Assume that each country decides to use half of its resources in the production of each good. Show these points on the graphs for each country as point A.
- If these countries choose not to trade, what would be the total world production of popcorn and peanuts?
- Now suppose that each country decides to specialize in the good in which each has a comparative advantage. By specializing, what is the total world production of each product now?
- If each country decides to trade 100 units of popcorn for 100 units of peanuts, show on the graphs the gain each country would receive from trade. Label these points B.

ANS:

- Alpha would be producing 125 units of peanuts and 75 units of popcorn (point A on its PPF), and Omega would be producing 50 units of peanuts and 150 units of popcorn (point A on its PPF).
- The total world production of peanuts would be 175 units, and the total world production of popcorn would be 225 units.
- The total world production of peanuts would now be 250 units, and the total world production of popcorn would now be 300 units.
- Alpha would be producing 250 units of peanuts and would trade 100 of them to Omega, leaving Alpha with 150 units of peanuts. Alpha would then receive 100 units of popcorn from Omega. Omega would be producing 300 units of popcorn and would trade 100 of them to Alpha, leaving Omega with 200 units of popcorn. Omega would then receive 100 units of peanuts from Alpha.