

***Macroeconomics, 9e* (Abel/Bernanke/Croushore)**

**Chapter 2 The Measurement and Structure of the National Economy**

**2.1 National Income Accounting**

1) The accounting framework used in measuring current economic activity is called

- A) the U.S. expenditure accounts.
- B) the national income accounts.
- C) the flow of funds accounts.
- D) the balance of payments accounts.

Answer: B

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

2) The three approaches to measuring economic activity are the

- A) cost, income, and expenditure approaches.
- B) product, income, and expenditure approaches.
- C) consumer, business, and government approaches.
- D) private, public, and international approaches.

Answer: B

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

3) The value of a producer's output minus the value of the inputs it purchases from other producers is called the producer's

- A) surplus.
- B) profit.
- C) value added.
- D) gross product.

Answer: C

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

4) The value added of a producer is the

- A) total amount for which all its products sell minus its change in inventories.
- B) value of its total sales once externalities are accounted for.
- C) value of its output minus the value of the inputs it purchases from other producers.
- D) quality-adjusted amount of its total sales less any commissions paid.

Answer: C

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

5) The product approach to calculating GDP

A) adds together the market values of final goods and services produced by domestic and foreign-owned factors of production within the nation in some time period.

B) includes the market value of goods and services produced by households for their own consumption but excludes the value of the underground economy.

C) is superior to the income approach because, unlike the income approach, it gives us the real value of output.

D) adds together the market values of final goods, intermediate goods, and goods added to inventories.

Answer: A

Diff: 1

Topic: Section: 2.1

Question Status: New

6) The Bigdrill company drills for oil, which it sells for \$200 million to the Bigoil company to be made into gas. The Bigoil company's gas is sold for a total of \$600 million. What is the total contribution to the country's GDP from companies Bigdrill and Bigoil?

A) \$200 million

B) \$400 million

C) \$600 million

D) \$800 million

Answer: C

Diff: 2

Topic: Section: 2.1

Question Status: Previous Edition

7) Sam's Semiconductors produces computer chips, which it sells for \$10 million to Carl's Computer Company (CCC). CCC's computers are sold for a total of \$16 million. What is the value added of CCC?

A) \$6 million

B) \$10 million

C) \$16 million

D) \$26 million

Answer: A

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

8) The Compagnie Naturelle sells mounted butterflies, using butterfly bait it buys from another firm for \$20,000. It pays its workers \$35,000, pays \$1000 in taxes, and has profits of \$3000. What is its value added?

- A) \$3000
- B) \$19,000
- C) \$39,000
- D) \$59,000

Answer: C

Diff: 2

Topic: Section: 2.1

Question Status: Previous Edition

9) The equation total production = total income = total expenditure is called

- A) the goods—market equilibrium condition.
- B) the total identity.
- C) the fundamental identity of national income accounting.
- D) Say's Law.

Answer: C

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

10) The fundamental identity of national income accounting is

- A) total production = total income - total expenditure.
- B) total production = total income + total expenditure.
- C) total production = total income = total expenditure.
- D) total production = total income/total expenditure.

Answer: C

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

11) To ensure that the fundamental identity of national income accounting holds, changes in inventories are

- A) treated as part of expenditure.
- B) treated as part of saving.
- C) ignored.
- D) counted as consumption.

Answer: A

Diff: 1

Topic: Section: 2.1

Question Status: Previous Edition

12) One problem with using market values to measure GDP is that

- A) you cannot compare completely heterogeneous goods by using their dollar values.
- B) some useful goods and services are not sold in markets.
- C) prices for some goods change every year.
- D) market values of exported goods are usually priced in foreign currencies.

Answer: B

Diff: 1

Topic: Section: 2.1

Question Status: New

13) Describe the three different approaches to measuring the amount of economic activity that occurs during a period of time and explain why they all give identical measurements.

Answer: The approaches are the product approach, which measures the amount of output produced; the income approach, which measures the incomes received by producers of output; and the expenditure approach, which measures the amount of spending by the ultimate purchasers of output. They give identical measurements because everything that is produced is purchased by someone, so the expenditure and product approaches must be equal, and because anything that is purchased means that someone is earning income in the same amount, so the expenditure and income approaches must be equal.

Diff: 2

Topic: Section: 2.1

Question Status: Previous Edition

## 2.2 Gross Domestic Product

1) To what extent are homemaking and child-rearing accounted for in the government's GDP accounts?

- A) Not at all
- B) Only to the extent that they are provided for pay
- C) Only to the extent that taxes are paid on them
- D) All homemaking and child-rearing are accounted for

Answer: B

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

2) The measurement of GDP includes

- A) nonmarket goods such as homemaking and child-rearing.
- B) the benefits of clean air and water.
- C) estimated values of activity in the underground economy.
- D) purchases and sales of goods produced in previous periods.

Answer: C

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

3) Which of the following is included in U.S. GDP?

- A) The sale of a new car from a manufacturer's inventory
- B) The purchase of a watch from a Swiss company
- C) The sale of a used car
- D) A newly constructed house

Answer: D

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

4) Government statisticians adjust GDP figures to include estimates of

- A) the value of homemaking (work done within the home).
- B) the underground economy.
- C) child-rearing services provided by stay-at-home parents.
- D) the costs of pollution to society.

Answer: B

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

5) Because government services are not sold in markets,

- A) they are excluded from measurements of GDP.
- B) the government tries to estimate their market value and uses this to measure the government's contribution to GDP.
- C) they are valued at their cost of production.
- D) taxes are used to value their contribution.

Answer: C

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

6) Intermediate goods are

- A) capital goods, which are used up in the production of other goods but were produced in earlier periods.
- B) final goods that remain in inventories.
- C) goods that are used up in the production of other goods in the same period that they were produced.
- D) either capital goods or inventories.

Answer: C

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

- 7) Capital goods are
- A) a type of intermediate good.
  - B) final goods, because they are not used up during a given year.
  - C) produced in the same year as the related final good, whereas intermediate goods are produced in different years.
  - D) produced in one year, whereas final goods are produced over a period of more than one year.

Answer: B

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

- 8) Capital goods are
- A) not counted in GDP as final goods.
  - B) not used to produce other goods.
  - C) used up in the same period that they are produced.
  - D) goods used to produce other goods.

Answer: D

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

- 9) Marvin's Metal Company produces screws that it sells to Ford, which uses the screws as a component of its cars. In the national income accounts, the screws are classified as
- A) inventory.
  - B) final goods.
  - C) capital goods.
  - D) intermediate goods.

Answer: D

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

- 10) Larry's Lathe-makers Limited produces lathes, which are purchased by furniture manufacturers all over the world. The standard lathe depreciates over a twenty-five-year period. In the national income accounts, the lathes are classified as
- A) inventory.
  - B) raw materials.
  - C) capital goods.
  - D) intermediate goods.

Answer: C

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

11) Fred the farmer purchased five new tractors at \$20,000 each. Fred sold his old tractors to other farmers for \$50,000. The net increase in GDP of these transactions was

- A) \$50,000.
- B) \$100,000.
- C) \$125,000.
- D) \$150,000.

Answer: B

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

12) Inventories include each of the following *except*

- A) unsold finished goods.
- B) goods in process.
- C) raw materials held by firms.
- D) office equipment.

Answer: D

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

13) GDP differs from GNP because

- A)  $GDP = GNP - \text{net factor payments from abroad}$ .
- B)  $GNP = GDP - \text{net factor payments from abroad}$ .
- C)  $GDP = GNP - \text{capital consumption allowances}$ .
- D)  $GNP = GDP - \text{capital consumption allowances}$ .

Answer: A

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

14) If an American construction company built a road in Kuwait, this activity would be

- A) excluded from U.S. GNP.
- B) fully included in U.S. GDP.
- C) included in U.S. GNP only for that portion that was attributable to American capital and labor.
- D) included in U.S. GDP but not in U.S. GNP.

Answer: C

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

15) Nations such as Egypt and Turkey may have wide differences between GNP and GDP because both the countries

- A) have a high level of imports and exports relative to GNP.
- B) have a large portion of their GNP produced by multinational corporations.
- C) have a large number of citizens working abroad.
- D) purchase large amounts of military wares from other countries.

Answer: C

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

16) If  $C = \$500$ ,  $I = \$150$ ,  $G = \$100$ ,  $NX = \$40$ , and  $GNP = \$800$ , how much is  $NFP$ ?

- A) -\$10
- B) -\$5
- C) \$5
- D) \$10

Answer: D

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

17) If  $C = \$250$ ,  $I = \$50$ ,  $G = \$60$ ,  $NX = -\$20$ , and  $NFP = \$5$ , how much is GNP?

- A) \$365
- B) \$335
- C) \$340
- D) \$345

Answer: D

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

18) If  $C = \$400$ ,  $I = \$100$ ,  $G = \$50$ ,  $NX = \$30$ , and  $NFP = \$5$ , how much is GDP?

- A) \$580
- B) \$575
- C) \$585
- D) \$550

Answer: A

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition



19) The income—expenditure identity says that

- A)  $Y = C + S + T$ .
- B)  $Y = C + I + G$ .
- C)  $Y = C + I + G + NX$ .
- D)  $Y = C + I + G + NX + CA$ .

Answer: C

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

20) Which of the following is *not* a category of consumption spending in the national income accounts?

- A) Consumer durables
- B) Nondurable goods
- C) Services
- D) Housing purchases

Answer: D

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

21) Consumer spending is spending by \_\_\_\_\_ households on final goods and services produced \_\_\_\_\_.

- A) domestic; domestically and abroad
- B) domestic; domestically
- C) domestic and foreign; domestically and abroad
- D) domestic and foreign; domestically

Answer: A

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

22) Business fixed investment includes purchases of

- A) capital equipment and structures.
- B) land and energy.
- C) long-term bonds.
- D) inventories.

Answer: A

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

23) In the expenditure approach to GDP, which of the following would be excluded from measurements of GDP?

- A) Government payments for goods produced by foreign firms
- B) Government payments for goods produced by firms owned by state or local governments
- C) Government payments for welfare
- D) All government payments are included in GDP.

Answer: C

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

24) Net national product equals

- A) gross national product minus statistical discrepancy.
- B) gross national product minus depreciation.
- C) national income minus taxes on production and imports.
- D) national income plus depreciation.

Answer: B

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

25) National income equals

- A) net national product minus statistical discrepancy.
- B) gross national product minus depreciation.
- C) GNP minus depreciation and taxes on production and imports.
- D) net national product minus taxes on production and imports and employer contributions to Social Security.

Answer: A

Diff: 2

Topic: Section: 2.2

Question Status: New

26) Monica grows coconuts and catches fish. Last year she harvested 1500 coconuts and 600 fish. She values one fish as having a worth of three coconuts. She gave Rachel 300 coconuts and 100 fish for helping her to harvest coconuts and catch fish, all of which were consumed by Rachel. In terms of fish, Monica's income would equal

- A) 700 fish.
- B) 900 fish.
- C) 1100 fish.
- D) 2700 fish.

Answer: B

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

27) Monica grows coconuts and catches fish. Last year she harvested 1500 coconuts and 600 fish. She values one fish as having a worth of three coconuts. She gave Rachel 300 coconuts and 100 fish for helping her to harvest coconuts and catch fish, all of which were consumed by Rachel. Monica consumed the remaining fish and coconuts. In terms of fish, total consumption by both Monica and Rachel would equal

- A) 700 fish.
- B) 900 fish.
- C) 1100 fish.
- D) 2700 fish.

Answer: C

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

28) Monica grows coconuts and catches fish. Last year she harvested 1500 coconuts and 600 fish. She values one fish as having a worth of three coconuts. She gave Rachel 300 coconuts and 100 fish for helping her to harvest coconuts and catch fish, all of which were consumed by Rachel. Monica set aside 200 fish to help with next year's harvest. In terms of fish, consumption would equal

- A) 700 fish.
- B) 900 fish.
- C) 1100 fish.
- D) 2700 fish.

Answer: B

Diff: 3

Topic: Section: 2.2

Question Status: New

29) Private disposable income equals

- A) GNP - taxes + transfers + interest.
- B) NNP - taxes + transfers + interest.
- C) national income - taxes + transfers + interest.
- D) national income - taxes - transfers + interest.

Answer: A

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

30) Carl's Computer Center sells computers to business firms. Businesses then use the computers to produce other goods and services. Over the past year, sales representatives were paid \$3.5 million, \$0.5 million went for rent on the building, \$0.5 million went for taxes, \$0.5 million was profit for Carl, and \$10 million was paid for computers at the wholesale level. What was the firm's total contribution to GDP?

Answer: \$5 million. Note that the \$10 million paid for computers is not part of value added. Note also that the fact that the firm produces an intermediate good doesn't mean that it doesn't contribute to GDP.

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

31) Pete the Pizza Man produced \$87,000 worth of pizzas in the past year. He paid \$39,000 to employees, paid \$11,000 for vegetables and other ingredients, and paid \$5000 in taxes. He began the year with ingredient inventories valued at \$1000, and ended the year with inventories valued at \$2000. What was Pete's (and his employees') total contribution to GDP this year?

Answer:  $\$87,000 - \$11,000 \text{ paid for intermediate goods} + \$1000 \text{ change in inventories} = \$77,000$ .

Diff: 2

Topic: Section: 2.2

Question Status: Previous Edition

32) What is the main conceptual difference between GDP and GNP? How different are GDP and GNP for the United States? For countries with many citizens who work abroad?

Answer: GDP represents output produced within a country, while GNP represents output produced by a country's factors of production; the difference is net factor payments from abroad. For the United States there's little difference, but for countries that have many citizens working abroad, there may be a big difference.

Diff: 1

Topic: Section: 2.2

Question Status: Previous Edition

33) Citizens of the country of Heehaw produce hay and provide entertainment services (banjo playing). In one year they produced \$15 million worth of hay, with \$11 million consumed domestically and the other \$4 million sold to neighboring countries. They provided \$7 million worth of banjo-playing services, \$5 million in Heehaw, and \$2 million in neighboring countries. They purchased \$6 million worth of soda pop from neighboring countries. Calculate the magnitudes of GNP, GDP, net factor payments from abroad, net exports, and the current account balance.

Answer: GNP is output by citizens, which equals \$15 million + \$7 million = \$22 million. GDP is output produced in the country, which equals \$15 million (hay) + \$5 million (domestic banjo playing) = \$20 million. Net factor payments from abroad represent the difference between GNP and GDP; this is the \$2 million paid for banjo playing in other countries. Net exports are \$4 million (hay sold abroad) minus \$6 million (soda pop imports) = -\$2 million. (Note that banjo playing abroad is not part of GDP, so it is not part of net exports either.) The current account balance is net exports + net factor payments = -\$2 million + \$2 million = 0.

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

34) In the country of Kwaki, people produce canoes, fish for salmon, and grow corn. In one year they produced 5000 canoes using labor and natural materials only, but sold only 4000, as the economy entered a recession. The cost of producing each canoe was \$1000, but the ones that sold were priced at \$1250. They fished \$30 million worth of salmon. They used \$3 million of the salmon as fertilizer for corn. They grew and ate \$55 million of corn. What was Kwaki's GDP for the year?

Answer: Inventories are valued at the cost of production, so the 1000 canoes in inventory were valued at \$1000 each, for a total of \$1 million. Four thousand canoes at \$1250 each totaled \$5 million. Salmon as a final good were worth \$27 million (the other \$3 million were used up as an intermediate good), and corn worth \$55 million was grown. So total GDP (in millions) was \$1 + \$5 + \$27 + \$55 = \$88 million.

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

35) In one year in the country of Countem, workers earned \$4150, proprietor's income was \$392, rental income was \$20, corporate profits were \$683, net interest was \$228, taxes on production and imports were \$329, business current transfer payments were \$12, the current surplus of government enterprises was \$3, statistical discrepancy was \$28, consumption of fixed capital was \$882, factor income received from the rest of the world was \$331, and payments of factor income to the rest of the world was \$623. Based on these data, compute national income, net national product, gross national product, and gross domestic product.

Answer: The first eight items sum to national income, which equals \$5817. Adding the statistical discrepancy to national income gives net national product, which is thus \$5845. Adding consumption of fixed capital to that gives gross national product, which is thus 6727. Subtract net factor income, which equals factor income received from the rest of the world minus payments of factor income to the rest of the world ( $\$331 - \$623 = -\$292$ ), from gross national product equals gross domestic product, which is thus \$7019.

Diff: 3

Topic: Section: 2.2

Question Status: Previous Edition

### 2.3 Saving and Wealth

1) The value of a household's assets minus the value of its liabilities is called

- A) wealth.
- B) income.
- C) debt.
- D) stock.

Answer: A

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

2) Private saving is defined as

- A) private disposable income minus consumption.
- B) net national product minus consumption.
- C) private disposable income minus consumption plus interest.
- D) private disposable income minus consumption plus interest plus transfer payments.

Answer: A

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

3) In a given year, a country's GDP = \$9841, net factor payments from abroad = \$889, taxes = \$869, transfers received from the government = \$296, interest payments on the government's debt = \$103, consumption = \$8148, and government purchases = \$185. The country had private saving equal to

- A) \$285.
- B) \$3850.
- C) \$2397.
- D) \$2112.

Answer: D

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

4) In a given year, a country's GDP = \$9841, net factor payments from abroad = \$889, taxes = \$869, transfers received from the government = \$296, interest payments on the government's debt = \$103, consumption = \$8148, and government purchases = \$185. The country had government saving equal to

- A) \$285.
- B) \$3850.
- C) \$2397.
- D) \$2112.

Answer: A

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

5) In a given year, a country's GDP = \$9841, net factor payments from abroad = \$889, taxes = \$869, transfers received from the government = \$296, interest payments on the government's debt = \$103, consumption = \$8148, and government purchases = \$185. The country had private saving equal to

- A) \$285.
- B) \$3850.
- C) \$2397.
- D) \$2112.

Answer: C

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

6) If a local government collects taxes of \$500,000, has \$350,000 of government consumption expenditures, makes transfer payments of \$100,000, and has no interest payments or investment, its budget would

- A) show a surplus of \$150,000.
- B) show a surplus of \$50,000.
- C) be in balance with neither a surplus nor a deficit.
- D) show a deficit of \$50,000.

Answer: B

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

7) If a local government collects taxes of \$250,000, has \$175,000 of government consumption expenditures, makes transfer payments of \$75,000, and has no interest payments or investment, its budget would

- A) show a surplus of \$100,000.
- B) show a surplus of \$75,000.
- C) be in balance with neither a surplus nor a deficit.
- D) show a deficit of \$75,000.

Answer: C

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

8) The government budget surplus equals

- A) government purchases plus transfers.
- B) government receipts minus government outlays.
- C) government purchases minus net receipts.
- D) government purchases minus transfers.

Answer: B

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

9) Which of the following equations describes government saving?

- A)  $T - TR - INT - G$
- B)  $T - TR - INT + G$
- C)  $T - TR + INT - G$
- D)  $T - TR + INT + G$

Answer: A

Diff: 1

Topic: Section: 2.3

Question Status: New



10) Which of the following equations describes the government deficit?

- A)  $G + TR + INT - T$
- B)  $G + TR - INT - T$
- C)  $G - TR + INT - T$
- D)  $G - TR - INT - T$

Answer: A

Diff: 1

Topic: Section: 2.3

Question Status: New

11) National saving equals private saving plus government saving, which in turn equals

- A)  $C + S + T$ .
- B)  $GDP + C + G$ .
- C)  $GDP + NFP$ .
- D)  $GDP + NFP - C - G$ .

Answer: D

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

12) The uses-of-saving identity says that an economy's private saving is used for

- A) investment, interest expenses, and the government budget deficit.
- B) investment, the government budget deficit, and the current account.
- C) investment, interest expenses, the government budget deficit, and the current account.
- D) investment, interest expenses, the government budget deficit, transfer payments, and the current account.

Answer: B

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

13) The uses-of-saving identity shows that if the government budget deficit rises, then one of the following must happen.

- A) Private saving must rise, investment must fall, and/or the current account must fall.
- B) Private saving must rise, investment must fall, and/or the current account must rise.
- C) Private saving must rise, investment must rise, and/or the current account must fall.
- D) Private saving must fall, investment must rise, and/or the current account must rise.

Answer: A

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

14) Saving is a \_\_\_\_\_ variable, and wealth is a \_\_\_\_\_ variable.

- A) stock; flow
- B) stock; stock
- C) flow; flow
- D) flow; stock

Answer: D

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

15) Suppose that private saving is \$1590 billion, investment is \$1945 billion, and the current account balance is -\$489 billion. From the uses-of-saving identity, how much is government saving?

- A) -\$134 billion
- B) -\$844 billion
- C) \$844 billion
- D) \$134 billion

Answer: A

Diff: 3

Topic: Section: 2.3

Question Status: Previous Edition

16) Suppose that national saving is \$1456 billion, investment is \$1945 billion, and private saving is \$1590 billion. How much is the current account balance?

- A) \$489 billion
- B) \$221 billion
- C) -\$221 billion
- D) -\$489 billion

Answer: D

Diff: 3

Topic: Section: 2.3

Question Status: Previous Edition

17) In the mid- to late 1980s, the United States had "twin deficits" because both \_\_\_\_\_ and \_\_\_\_\_ were negative.

- A) government saving; private saving
- B) saving; investment
- C) the current account; investment
- D) government saving; the current account

Answer: D

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

18) How are net exports, net factor payments from abroad, and the current account balance related?

Answer:  $NX + NFP = CA$ .

Diff: 1

Topic: Section: 2.3

Question Status: Previous Edition

19) How does chain weighting lead to a different measurement of real GDP than the methods used by the BEA prior to 1996? What are the advantages of chain weighting? What are the disadvantages?

Answer: Prior to 1996, the growth rate of real GDP depended on which year was chosen as the base year. Now, however, the current year and preceding year are used as base years, averaging results using each as base year. The advantages of this method are that there is no longer a need to recompute historical data or to change base years. However, a disadvantage is that real GDP is no longer the sum of its components.

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

20) In a given year, a country's GDP = \$3843, net factor payments from abroad = \$191, taxes = \$893, transfers received from the government = \$422, interest payments on the government's debt = \$366, consumption = \$3661, and government purchases = \$338. Calculate the values of private saving, government saving, and national saving.

Answer: Private saving =  $Y + NFP - T + TR + INT - C = \$3843 + \$191 - \$893 + \$422 + \$366 - \$3661 = \$268$ . Government saving =  $T - TR - INT - G = \$893 - \$422 - \$366 - \$338 = -\$233$ .

National saving =  $Y + NFP - C - G = \$3843 + \$191 - \$3661 - \$338 = \$35$ .

Diff: 2

Topic: Section: 2.3

Question Status: Previous Edition

## 2.4 Real GDP, Price Indexes, and Inflation

1) The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon.

Year 1			Year 2	
Good	Quantity	Price	Quantity	Price
Milk	500	\$2	900	\$3
Butter	2000	\$1	3000	\$2

Between Year 1 and Year 2, nominal GDP grew by

- A) 60.0%.
- B) 65.5%.
- C) 83.3%.
- D) 190.0%.

Answer: D

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

2) The value of real GDP in the current year equals

- A) the value of current-year output in prices of the base year.
- B) the value of current-year output in prices of the current year.
- C) the value of base-year output in prices of the base year.
- D) the value of base-year output in prices of the current year.

Answer: A

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

3) The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon.

Year 1			Year 2	
Good	Quantity	Price	Quantity	Price
Milk	500	\$2	900	\$3
Butter	2000	\$1	3000	\$2

Between Year 1 and Year 2, the percent change in real GDP (based on Year 1 as a base year) was

- A) 58%.
- B) 60%.
- C) 130%.
- D) 190%.

Answer: B

Diff: 3

Topic: Section: 2.4

Question Status: Previous Edition

4) The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon.

Good	Year 1		Year 2	
	Quantity	Price	Quantity	Price
Milk	500	\$2	900	\$3
Butter	2000	\$1	3000	\$2

Between Year 1 and Year 2, the GDP deflator (based on Year 1 as a base year) rose

- A) 60.00%.
- B) 81.25%.
- C) 83.33%.
- D) 123.00%.

Answer: B

Diff: 3

Topic: Section: 2.4

Question Status: Previous Edition

5) Currently, the U.S. national income and product accounts (NIPA) use what type of price index to calculate real GDP?

- A) Fixed-weight
- B) Variable-weight
- C) Chain-weight
- D) Heavy-weight

Answer: C

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

6) If nominal GDP for 2009 is \$6400 billion and real GDP for 2010 is \$6720 billion (in 2009 dollars), then the growth rate of real GDP is

- A) 0%.
- B) 0.5%.
- C) 5%.
- D) 50%.

Answer: C

Diff: 2

Topic: Section: 2.4

Question Status: Revised

7) If real GDP for 2009 is \$6400 billion and nominal GDP for 2010 is \$6720 billion (in 2010 dollars), then the growth rate of real GDP is

- A) 0%.
- B) 0.5%.
- C) 5%.
- D) unknown based on the given information.

Answer: D

Diff: 2

Topic: Section: 2.4

Question Status: New

8) If the price index was 100 in 2000 and 120 in 2010, and nominal GDP was \$360 billion in 2000 and \$480 billion in 2010, then the value of 2010 GDP in terms of 2000 dollars would be

- A) \$300 billion.
- B) \$384 billion.
- C) \$400 billion.
- D) \$424 billion.

Answer: C

Diff: 3

Topic: Section: 2.4

Question Status: Previous Edition

9) Nominal GDP in 1970 was \$1035.6 billion, and in 1980 it was \$2784.2 billion. The GDP price index was 30.6 for 1970 and 60.4 for 1980, where 1992 was the base year. Calculate the percent change in real GDP in the decade from 1970 to 1980. Round off to the nearest percentage point.

- A) 36%
- B) 97%
- C) 136%
- D) 169%

Answer: A

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

10) Nominal personal consumption expenditures in the United States were \$1760.4 billion in 1980 and rose to \$3839.3 billion in 1990. The price index for personal consumption expenditures was 58.5 for 1980 and 92.9 for 1990, where 1992 was the base year. Calculate the percent change in real personal consumption expenditures (rounded to the nearest percentage point) in the decade.

- A) 37%
- B) 59%
- C) 118%
- D) 137%

Answer: A

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

11) Nominal gross private domestic investment was \$1888.0 billion in 2008 and rose to \$2057.4 billion in 2009. The chain-weight price index for gross private domestic investment was 106.6 for 2008 and 110.3 for 2009, where 2005 was the base year. Calculate the percent change in real gross private domestic investment (rounded to the nearest percentage point) from 2008 to 2009.

- A) 1%
- B) 3%
- C) 4%
- D) 5%

Answer: D

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

12) A disadvantage of chain-weighting is that

- A) past inflation rates change whenever the base year changes.
- B) past growth rates of real GDP change whenever the base year changes.
- C) it causes output growth to slow.
- D) the components of real GDP don't sum to real GDP.

Answer: D

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

13) The U.S. inflation rate \_\_\_\_\_ in the 1960s and 1970s, \_\_\_\_\_ in the 1980s, and \_\_\_\_\_ in the 1990s and 2000s.

- A) was steady; rose sharply; fell
- B) was steady; rose sharply; remained high
- C) rose; fell sharply; remained low
- D) rose; fell sharply; rose again

Answer: C

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

14) Two years ago, the GDP deflator for Old York was 300, and today it is 330.75. Based on this information the annual average inflation rate for the two years was

- A) 5%.
- B) 5.125%.
- C) 10%.
- D) 10.25%.

Answer: A

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

15) If the price index last year was 1.0 and today it is 1.4, what is the inflation rate over this period?

- A) -4%
- B) 1.4%
- C) 4%
- D) 40%

Answer: D

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

16) You are given information on the consumer price index (CPI), where the values given are those for December 31 of each year.

Year	CPI
2005	126.1
2006	133.8
2007	137.9
2008	141.9
2009	145.8

In which year was the inflation rate the highest?

- A) 2006
- B) 2007
- C) 2008
- D) 2009

Answer: A

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition



17) The consumer price index (CPI) was 180 for 2009 when using 1995 as the base year (1995 = 100). Now suppose we switch and use 2009 as the base year (2009 = 100). What is the CPI for 1995 with the new base year?

- A) 18.0
- B) 55.6
- C) 80.0
- D) 111.2

Answer: B

Diff: 3

Topic: Section: 2.4

Question Status: Previous Edition

18) Nominal government purchases were \$2226.2 billion in 2008 and rose to \$2372.8 billion in 2009. Real government purchases were \$1940.6 for 2008 and \$1958.0 for 2009, where 2005 was the base year. Calculate the percent change in the chain-weight price index for government purchases (rounded to the nearest percentage point) from 2008 to 2009.

- A) 2%
- B) 4%
- C) 6%
- D) 8%

Answer: C

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

19) The Boskin Commission concluded that the CPI overstates increases in the cost of living by \_\_\_\_\_ percentage point(s) per year.

- A) Less than 1
- B) 1 to 2
- C) About 3
- D) Over 4

Answer: B

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

20) The CPI may overstate inflation for all the following reasons *except*

- A) problems measuring changes in the quality of goods.
- B) substitution by consumers towards cheaper goods.
- C) problems measuring the quality of services.
- D) changes in Social Security benefits.

Answer: D

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

21) The Fed prefers to focus on inflation based on which price index?

- A) personal consumption expenditures price index
- B) consumer price index
- C) GDP deflator
- D) producer price index

Answer: A

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

22) The Federal Reserve focuses on the inflation rate based on the \_\_\_\_\_ rather than the CPI; to measure the underlying trend in inflation, it focuses on the \_\_\_\_\_.

- A) GDP deflator; overall GDP deflator
- B) GDP deflator; core GDP deflator
- C) PCE price index; core PCE price index
- D) PCE price index; overall PCE price index

Answer: C

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

23) What is the difference between nominal and real economic variables? Why do economists tend to concentrate on changes in real magnitudes?

Answer: Nominal variables are in units of money, while real variables are in physical quantities of output. We measure nominal variables using current market prices and real variables using market prices in a given base year. Nominal variables may increase, but you don't know if the increase is due to higher prices and the same quantity, or a higher quantity with unchanged prices; real variables reflect just quantity changes. For the most part, real variables (consumption, investment, and the capital stock) affect each other in the economy, with lesser roles played by nominal variables (money supply, and price level).

Diff: 1

Topic: Section: 2.4

Question Status: Previous Edition

24) The country of Myrule has produced the following quantity of gauges and potatoes, with the price of each listed in dollar terms.

	Year			
	1		2	
	Quantity	Price	Quantity	Price
Gauges	8000	\$4	10,000	\$3
Potatoes	6000	\$8	5000	\$14

(a) Using Year 1 as the base year, what is the growth rate of real GDP from Year 1 to Year 2?

(b) Based on the GDP deflator, what is the inflation rate from Year 1 to Year 2?

Answer:

(a) Real GDP for Year 1 = Year 1 quantities at Year 1 prices =  $(8000 \times \$4) + (6000 \times \$8) = \$80,000$ .

Real GDP for Year 2 = Year 2 quantities at Year 1 prices =  $(10,000 \times \$4) + (5000 \times \$8) = \$80,000$ .

Growth rate of real GDP = 0%

(b) Nominal GDP for Year 1 = Year 1 quantities at Year 1 prices =  $(8000 \times \$4) + (6000 \times \$8) = \$80,000$ .

Nominal GDP for Year 2 = Year 2 quantities at Year 2 prices =  $(10,000 \times \$3) + (5000 \times \$14) = \$100,000$ .

GDP deflator = nominal GDP/real GDP

GDP deflator in Year 1 =  $\$80,000/\$80,000 = 1$ .

GDP deflator in Year 2 =  $\$100,000/\$80,000 = 1.25$ .

Inflation rate =  $[(1.25/1) - 1] \times 100\% = 25\%$ .

Diff: 3

Topic: Section: 2.4

Question Status: Previous Edition

25) By how much does the CPI overstate true increases in the cost of living, according to the Boskin Commission? What are the main reasons for this bias in the CPI? What are the economic implications of the bias?

Answer: The Boskin Commission reported that the CPI overstates inflation by 1 to 2 percentage points per year. The bias arises because of difficulty in measuring quality change (especially for services) and because the CPI doesn't account for the substitution that people make between goods when relative prices change. The bias implies that our measures of real income growth are understated and that Social Security benefits are being adjusted more than they should be to account for inflation.

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

26) In 1975, Richard Petty won the NASCAR race in Richmond, earning \$6265. In 2006, Dale Earnhardt, Jr., won the race, earning \$239,166. The CPI index was 52.5 in 1975 and 198.7 in 2006 (base year = 1982-1984). Calculate the real earnings (based on base year 1982-1984) of both Petty and Earnhardt.

Answer: Petty:  $\$6265/(52.5/100) = \$11,933$ . Earnhardt:  $\$239,166/(198.7/100) = \$120,365$ . So Earnhardt's real earnings were over ten times those of Petty (thanks to NASCAR's increased popularity).

Diff: 2

Topic: Section: 2.4

Question Status: Previous Edition

27) Nominal GDP in a country was \$8759.9 billion in 2014 and \$9254.6 billion in 2015. The GDP deflator was 102.86 for 2014 and 104.37 for 2015.

(a) What is the growth rate of nominal GDP between 2014 and 2015?

(b) What is the inflation rate from 2014 to 2015?

(c) What is the growth rate of real GDP from 2014 to 2015?

Answer:

(a)  $9254.6/8759.9 \times 100\% = 5.6\%$ .

(b)  $[(104.37/102.86) - 1] \times 100\% = 1.5\%$ .

(c) Real GDP (2014) =  $8759.9/1.0286 = 8516.3$ .

Real GDP (2015) =  $9254.6/1.0437 = 8867.1$ .

Growth rate =  $[(8867.1/8516.3) - 1] \times 100\% = 4.1\%$ .

Note that the growth rate of nominal GDP (5.6%) equals the inflation rate (1.5%) plus the growth rate of real GDP (4.1%).

Diff: 2

Topic: Section: 2.4

Question Status: Revised

## 2.5 Interest Rates

1) The nominal interest rate minus the inflation rate is the

A) depreciation rate.

B) real interest rate.

C) discount rate.

D) forward rate.

Answer: B

Diff: 1

Topic: Section: 2.5

Question Status: Previous Edition

2) By Marks buys a one-year German government bond (called a bund) for \$400. He receives principal and interest totaling \$436 one year later. During the year the CPI rose from 150 to 162. The nominal interest rate on the bond was \_\_\_\_\_, and the real interest rate was \_\_\_\_\_.

- A) 9%; 1%
- B) 9%; -1%
- C) 36%; 24%
- D) 36%; 12%

Answer: A

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

3) The expected real interest rate ( $r$ ) is equal to

- A) nominal interest rate minus inflation rate.
- B) nominal interest rate minus expected inflation rate.
- C) expected nominal interest rate minus inflation rate.
- D) nominal interest rate plus expected inflation rate.

Answer: B

Diff: 1

Topic: Section: 2.5

Question Status: Previous Edition

4) In 2008, inflation exceeded expected inflation. In 2009, expected inflation exceeded inflation. Therefore the real interest rate was \_\_\_\_\_ than the expected real interest rate in 2008 and the real interest rate was \_\_\_\_\_ than the expected real interest rate in 2009.

- A) less; less
- B) less; greater
- C) greater; less
- D) greater; greater

Answer: B

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

5) In 2008, expected inflation exceeded inflation. In 2009, inflation exceeded expected inflation. Therefore the real interest rate was \_\_\_\_\_ than the expected real interest rate in 2008 and the real interest rate was \_\_\_\_\_ than the expected real interest rate in 2009.

- A) less; less
- B) less; greater
- C) greater; less
- D) greater; greater

Answer: C

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

6) If the expected inflation rate was 2.5%, the expected real interest rate was 4.0%, and the actual inflation rate turned out to be 3.2%, then the real interest rate equals

- A) 1.7%.
- B) 3.2%.
- C) 3.3%.
- D) 4.7%.

Answer: C

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

7) If the expected inflation rate was 2.5%, the expected real interest rate was 4.0%, and the real interest rate turned out to be 5.1%, then the actual inflation rate equals

- A) 1.4%.
- B) 1.5%.
- C) 2.6%.
- D) 6.5%.

Answer: A

Diff: 2

Topic: Section: 2.5

Question Status: New

8) If the expected inflation rate was 2.5%, the expected real interest rate was 4.0%, and the real interest rate turned out to be 5.1%, then the nominal interest rate equals

- A) 1.4%.
- B) 1.5%.
- C) 2.6%.
- D) 6.5%.

Answer: D

Diff: 2

Topic: Section: 2.5

Question Status: New

9) If the nominal interest rate on a one-year loan was 7%, the expected inflation rate over the year was 3% and the actual inflation rate over the year turned out to be 3.5%, then the expected real interest rate equals

- A) 6.5%.
- B) 4.0%.
- C) 3.75%.
- D) 3.5%.

Answer: B

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

10) If the nominal interest rate on a one-year loan was 7%, the actual inflation rate over the year was 3% and the expected inflation rate over the year was 2.5%, then the expected real interest rate equals

- A) 4.5%.
- B) 4.0%.
- C) 3.75%.
- D) 3.5%.

Answer: A

Diff: 2

Topic: Section: 2.5

Question Status: New

11) By Marks buys a one-year German government bond (called a bund) for \$400. He receives principal and interest totaling \$436 one year later. During the year the CPI rose from 150 to 162, but he had thought the CPI would be at 159 by the end of the year. By Marks had expected the real interest rate to be \_\_\_\_\_, but it actually turned out to be \_\_\_\_\_.

- A) 8%; 1%
- B) 6%; 3%
- C) 3%; 1%
- D) 1%; 3%

Answer: C

Diff: 3

Topic: Section: 2.5

Question Status: Previous Edition

12) Historical analysis of real interest rates in the United States shows that

- A) real interest rates were unusually low in both the 1970s and 1980s.
- B) real interest rates were unusually high in both the 1970s and 1980s.
- C) real interest rates were unusually low in the 1970s and unusually high in the 1980s.
- D) real interest rates were unusually low in the 1980s, spurring the economic growth that occurred during the Reagan administration.

Answer: C

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

13) The nominal interest rate is 7%, today's price level is 150, and you expect the price level to be 156 one year from now. What is the expected inflation rate? What is the expected real interest rate?

Answer: Expected inflation rate =  $156/150 - 1 = 0.04 = 4\%$ ; expected real interest rate =  $7\% - 4\% = 3\%$ .

Diff: 1

Topic: Section: 2.5

Question Status: Previous Edition

14) Loretta agrees to lend Ted \$500,000 to buy computers for his consulting firm. They agree to a nominal interest rate of 8%. Both expect the inflation rate to be 2%.

(a) Calculate the expected real interest rate.

(b) If inflation turns out to be 3% over the life of the loan, what is the real interest rate? Who gains from unexpectedly high inflation, Loretta or Ted?

(c) If inflation turns out to be 1% over the life of the loan, what is the real interest rate? Who gains from unexpectedly low inflation, Loretta or Ted?

Answer:

(a)  $8\% - 2\% = 6\%$ .

(b)  $8\% - 3\% = 5\%$ . Ted gains from unexpectedly high inflation, because he repays the loan with dollars that aren't worth as much as was expected.

(c)  $8\% - 1\% = 7\%$ . Loretta gains from unexpectedly low inflation, because she gets repaid with dollars that are worth more than was expected.

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition

15) You took out a loan one year ago at a nominal interest rate of 7.5%. The CPI stood at 173.2 at the time and you expected it to rise to 178.6 over the year. Today the CPI is actually 179.5. Calculate the expected real interest rate on the loan and the real interest rate on the loan.

Answer: The expected inflation rate when you took out the loan equals  $(178.6 - 173.2)/173.2 = 3.1\%$ , so your expected real interest rate was  $7.5\%$  (nominal interest rate) -  $3.1\%$  (expected inflation rate) =  $4.4\%$ . The actual inflation rate over the period equals  $(179.5 - 173.2)/173.2 = 3.6\%$ , so your real interest rate was  $7.5\%$  (nominal interest rate) -  $3.6\%$  (inflation rate) =  $3.9\%$ .

Diff: 2

Topic: Section: 2.5

Question Status: Previous Edition