What Is Gross Domestic Product?
- **Gross domestic product (GDP)** is the total _____________ value of all ________ goods and services produced ________ in a country.
- Gross domestic product can be determined by multiplying the __________ of each good by the ________ produced of that good.

Why Count Only Final Goods?
- An _______________________ good is a good that is not ready for use or purchase. It could be a good that is partially _____________. It could even be the ________________ that are used in producing a final product.
- Suppose economists counted both final and intermediate goods and services when they computed GDP. Then they would be __________ ________________, or counting goods more than once.

Does GDP Omit Anything?
- We do not count ______________ goods and services in GDP because we do not have any ________ of their sale or purchase.
- Any legal transaction that is ______ recorded also cannot be counted. If someone is paid in ________, with no sales receipt, the transaction is not likely to be recorded.
- We do not count goods and services that are traded ____________ official market settings. (EX: Household chores)
- The sale of ________ goods is not counted in GDP.
- ________ transactions and other ______________ transactions are also not included in GDP.
- ________________, such as social security checks, are not exchanged for goods or services, and are also not counted in GDP.

The Difference Between GDP and GNP
- GNP is the gross ____________ product.
- GNP is a measure of the total market value of final goods and services produced by ________________, no matter where in the __________ they live.
- GDP is the total market value of all final goods and services produced within the _____________ of the United States, no matter ________ produces them.

---

SECTION 2
Measuring GDP

How Is GDP Measured?
- The GDP of the United States in 2005 was more than $_______________.
- Economists determined this number by adding up the amount spent by four ________: household, business, government, and foreign. (See chart on next page)

1. Amounts spent by the household sector are called _________________.
2. Amounts spent by the business sector are called _________________.
3. Amounts spent by the government sector are called _________________. As mentioned before, government purchases do not include government transfer payments.
4. Spending by residents of other countries on goods produced in the United States is called _________________. Spending by Americans on foreign-produced goods is called _________________.
- All goods produced in the economy must be bought by someone in ________ of the four sectors of the economy. Summing the spending of the four sectors and ________________ import spending will give a good estimate of GDP. (See Illustration)
The Expenditures Made by the Four Sectors of the Economy

<table>
<thead>
<tr>
<th>Sector of the economy</th>
<th>Name of expenditures</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>Consumption</td>
<td>Expenditures made by the household sector on goods for personal use</td>
<td>TV sets, telephones, clothes, lamps, cars</td>
</tr>
<tr>
<td>Business</td>
<td>Investment</td>
<td>Expenditures made by the business sector on goods used in producing other goods, also includes business inventories</td>
<td>Tools, machines, factories</td>
</tr>
<tr>
<td>Government</td>
<td>Government purchases</td>
<td>Expenditures made by federal, state, and local governments</td>
<td>Paper, pens, tanks, planes</td>
</tr>
<tr>
<td>Foreign</td>
<td>Exports</td>
<td>Expenditures made by foreigners for American-made goods</td>
<td>Cars, wheat, computers</td>
</tr>
<tr>
<td></td>
<td>Imports</td>
<td>Expenditures made by Americans for foreign-made goods</td>
<td>Cars, radios, computers</td>
</tr>
</tbody>
</table>

Calculating GDP

Gross domestic product (GDP) is the total market value of all final goods and services produced annually in a country. (Note that import spending is *subtracted* when calculating GDP.)

\[
GDP = C + I + G + EX – IM
\]

Is Every Good That Is Produced Also Sold?
- Yes. The government assumes that _______________ that is produced is _______________ by someone.

GDP Versus Quality of Life
- Greater production of goods and services is only ______ of the many factors that contribute to being better off or possessing greater _____________.
- All other things being equal, greater production may result in reduced ____________ time or reduced ____________ time.
- _______________ must be considered when comparing the GDP of two different nations:
- _______________ GDP = GDP ÷ Population.
SECTION 3
Real GDP

Basic concept of this section and all you really need to know...

Real GDP = Gross Domestic Product that has been _______________ for price changes. It is essentially GDP measured in ______________ prices determined by a __________ year.

SECTION 4
Measuring Price Changes and the Unemployment Rate

Calculating the Change in a Single Price

- When a good ______________ in price from one year to the next, it is ______ to calculate the percentage of change in price.
- For example, if a home increased in price from $200,000 in 2004 to $220,000 in 2005, the percentage change in price was 10 percent.

The Consumer Price Index

- Economists are much more interested in what happens to prices in __________ than in what happens to a ______ price.
- A price index is a measure of the price level, or the __________ level of prices.
- The most widely used price index is the ______________ (CPI).
- The consumer price index is calculated using a __________ of thousands of households. The survey asks what consumers ______ for a group of goods that represent all the types of goods they might purchase in a ____. This group of goods is called the ______________.
- The percentage change in the CPI is equal to the CPI in the later year minus the CPI in the earlier year, divided by the CPI in the earlier year, multiplied by 100.

\[
\text{Percentage change in CPI} = \frac{\text{CPI}_{\text{later year}} - \text{CPI}_{\text{earlier year}}}{\text{CPI}_{\text{earlier year}}} \times 100
\]

- Taken individually, CPI numbers mean very ______. But if we __________ the numbers, we can learn what is happening to prices over time. What happened to prices in the United States between 1995 and 2004? (Answer: They rose fairly steadily.)

The Unemployed, Unemployment Rates, and Employment Rates

- The total population can be divided into two major groups: the non-institutional adult civilian population, and all others.
- The non-institutional adult civilian population can be further subdivided into two groups: persons in the ______ labor force and persons ______ in the labor force.
- The unemployed are persons in the civilian labor force who are __________ for work but do not have jobs.
- The unemployment rate is the percentage of the civilian labor force that is __________. It is equal to the number of unemployed persons divided by the civilian labor force.
- The employment rate is the percentage of the non-institutional adult civilian population that is employed. It is equal to the number of employed persons divided by the non-institutional adult civilian population.

\[
\text{Unemployment rate} = \frac{\text{Unemployed persons}}{\text{Civilian labor force}}
\]

\[
\text{Employment rate} = \frac{\text{Employed persons}}{\text{Noninstitutional adult civilian population}}
\]
NATIONAL INCOME ACCOUNTING (Section 1)

Determine whether or not the value of the good or service in each of the transactions in questions 1-14 is included in the calculation of this year’s U.S. GDP or if it is included in GNP. For each of the items, explain why you made your decision.

1. Mycah buys a new bicycle that was produced in Detroit.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

2. Kate cashes her Social Security check.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

3. John buys a used refrigerator that was produced in Cleveland.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

4. Melissa buys a new Hyundai car that was produced in South Korea. (Hyundai is a foreign car company)
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

5. Bryan buys a new Hyundai car that was produced in Alabama.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

6. Elizabeth, an American citizen, owns and operates a coffee shop in Mexico.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

7. Don owns and operates an accounting firm in Minnesota.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

8. Stacy paints her parents’ house.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

9. Goodyear sells auto tires produced in Akron, Ohio to General Motors for use on new GM cars.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

10. Dianne buys stock in Starbucks.
    Answer (GDP, not GDP, GNP): __________________________
    Explanation: _________________________________________________________________________________________

11. Travis receives cash for repairing a neighbor’s lawnmower.
    Answer (GDP, not GDP, GNP): __________________________
    Explanation: _________________________________________________________________________________________

12. Bruce buys bootlegged DVDs from a man on the street.
    Answer (GDP, not GDP, GNP): __________________________
    Explanation: _________________________________________________________________________________________
13. Dawn prepares a new area of her yard for a vegetable garden.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

14. Jonah buys a new dishwasher for his house. The dishwasher was produced in Texas.
   Answer (GDP, not GDP, GNP): __________________________
   Explanation: _________________________________________________________________________________________

MEASURING GDP (Section 2)

Economists use the equation GDP = C + I + G + EX – IM to calculate gross domestic product (GDP).

   C = Consumption (expenditures made by the household sector or consumers)
   I = Investment (expenditures made by the business sector)
   G = Government Purchases (expenditures made by the government, not including transfer payments)
   EX = Export Spending (amount spent by the residents of other countries for goods produced in the U.S.)
   IM = Import Spending (amount spent by Americans for foreign-produced goods)

In questions 15-24, identify the category into which the transaction should be placed by writing C, I, G, EX, or IM in the space provided. If the value of the good or service in the transaction is not included in GDP, indicate this by writing “not GDP” in the space.

15. ______ The U.S. government spends $5 billion to improve highways.
16. ______ Todd buys a new washing machine for his home.
17. ______ Judy buys a new computer for her engineering firm.
18. ______ Pfizer sells pharmaceuticals to a company in Germany.
19. ______ Bruce buys a Honda that was made in Japan.
20. ______ General Electric spends $10 million to build a new factory in New York.
21. ______ Mei-Ling buys stock in Google.
22. ______ The U.S. government pays your grandfather $500 as part of his Social Security entitlement.
23. ______ Melissa pays her hair stylist for a haircut.
24. ______ Widgets, Inc, buys new vans to update its aging fleet of delivery vehicles.

In questions 25-28, identify the spending component of GDP that will be affected by the event described. Then state whether GDP will rise or fall due to the event, assuming no other spending component of GDP changes.

25. Consumers choose to buy small foreign cars rather than domestic cars.
   Spending component: ______  GDP will ______ (rise or fall).
   Spending component: ______  GDP will ______ (rise or fall).
27. Congress passes a bill that includes a large amount of money earmarked for education.
   Spending component: ______  GDP will ______ (rise or fall).
28. Consumers go on spending sprees all across the country, buying goods with the Made in the USA label.
   Spending component: ______  GDP will ______ (rise or fall).
Per capita GDP is one measure of the standard of living in a country. In questions 29-31, calculate the per capita GDP rounded to the nearest dollar.

29. Country A has a population of 486,000 and a GDP of $27 billion. Per capita GDP is _____________________.
30. Country B has a population of 127 million and a GDP of $3.745 trillion. Per capita GDP is _____________________.
31. Country C has a population of 4.5 million and a GDP of $183 billion. Per capita GDP is _____________________.

Complete the following table to compare the countries in questions 29-31.

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>Per Capita GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MEASURING PRICE CHANGES AND THE UNEMPLOYMENT RATE (Section 4)

Formulas related to price and CPI:

- **Percentage change in price** = \( \frac{\text{Price in later year} - \text{Price in earlier year}}{\text{Price in earlier year}} \times 100 \)
- **CPI}_{current\ year} = \frac{\text{Total dollar expenditure on the market basket in current year}}{\text{Total dollar expenditure on the market basket in base year}} \times 100
- **Percentage change in CPI** = \( \frac{\text{CPI in later year} - \text{CPI in earlier year}}{\text{CPI in earlier year}} \times 100 \)

Use the above formulas in questions 35-49.

35. Your favorite lunch is a hamburger and fries at the local Burger Barn. Last year, your favorite lunch was $5.95. This year, the same meal is $6.55. What was the percentage change in price? ______________

36. In 1967, the minimum wage was $1.00 an hour and the CPI was 32.9. In 1977, the minimum wage was $2.30 an hour and the CPI was 58.5. Was a minimum wage worker better off in 1967 or in 1977?

   - Percentage increase in the CPI from 1967 to 1977 = __________
   - Percentage increase in the minimum wage from 1967 to 1977 = __________
   - The minimum wage worker was better off in __________ (which year).

37. In 1985, the minimum wage was $3.35 an hour and the CPI was 105.5. In January of 2005, the minimum wage was $5.15 an hour and the CPI was 190.7. Was a minimum wage worker better off in 1985 or in January of 2005? Explain your answer.

   - Percentage increase in the CPI from 1985 to 2005 = __________
   - Percentage increase in the minimum wage from 1985 to 2005 = __________
   - The minimum wage worker was better off in __________ (which year).
Assume the market basket includes only the goods shown in the following table. Use the table to answer questions 38-42.

<table>
<thead>
<tr>
<th>Good</th>
<th>Quantity</th>
<th>Price in base year</th>
<th>Price in current year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pepperoni Pizza</td>
<td>15</td>
<td>$15.00</td>
<td>$17.50</td>
</tr>
<tr>
<td>Bottles of Soda</td>
<td>30</td>
<td>$ 1.25</td>
<td>$ 1.50</td>
</tr>
<tr>
<td>DVDs</td>
<td>10</td>
<td>$17.00</td>
<td>$19.00</td>
</tr>
</tbody>
</table>

38. The total amount spent on goods in the market basket in the base year was ____________________.

39. The total amount spent on goods in the market basket in the current year was ____________________.

40. The CPI for the base year was 100.

41. The CPI for the current year is ____________________.

42. The percentage change in the CPI from the base year to the current year was _____________________.

In questions 26-30 calculate the percentage change in the CPI between the two years shown. Round your answers to the nearest tenth of a percent.

43. Year CPI Percentage change in CPI: ____________________
    2000 168.8
    2005 190.7

44. Year CPI Percentage change in CPI: ____________________
    1990 127.4
    1995 150.3

45. Year CPI Percentage change in CPI: ____________________
    1980  77.8
    1985 105.5

46. Year CPI Percentage change in CPI: ____________________
    1970  37.8
    1975  52.1

47. Year CPI Percentage change in CPI: ____________________
    1930  17.1
    1935  13.6

Use your answers to questions 26-30 to answer questions 31 and 32.

48. Which five-year period had the largest increase in the CPI? ____________________

49. What is unusual about the period from 1930 to 1935? ____________________
Formulas that relate to unemployment:

Civilian Labor Force = Unemployed persons + Employed persons

Unemployment Rate = Unemployed persons / Civilian labor force

Employment Rate = Employed persons / Noninstitutional adult civilian population

49-60. Use the formulas to fill in the missing numbers in the following table.  **Change decimal answers to percents and round to the nearest tenth of a percent.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Noninstitutional adult civilian population</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Civilian labor force</th>
<th>Unemployment rate</th>
<th>Employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>15,000</td>
<td>8,178</td>
<td>522</td>
<td>8,390</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>15,250</td>
<td>8,000</td>
<td>____</td>
<td>8,390</td>
<td>____</td>
<td>____</td>
</tr>
<tr>
<td>2000</td>
<td>15,750</td>
<td>____</td>
<td>614</td>
<td>9,500</td>
<td>____</td>
<td>____</td>
</tr>
<tr>
<td>2005</td>
<td>16,000</td>
<td>9,400</td>
<td>____</td>
<td>10,000</td>
<td>____</td>
<td>____</td>
</tr>
</tbody>
</table>