SECTION 1

Inflation and Deflation

What Is Inflation?
- **Inflation** is an ___________ in the ______________ level, or the average level of prices.

How Do We Measure Inflation?
- If the price level increases from one year to the next, the economy is experiencing inflation.
- One way of determining inflation is to look for ___________ in the consumer price index (______).
  - For example, if the CPI increases from 180 in one year to 187 in the next year, the inflation rate is 3.89 percent.
  - Between 1960 and 2006, the United States experienced wide fluctuations in inflation rates.
    - Approximately what was the highest rate during those years? (Answer: _______ percent)
    - Approximately what was the lowest rate? (Answer: _______ percent)

Demand-Side Versus Supply-Side Inflation
- Inflation can originate on either the demand side of the economy or the supply side of the economy. If aggregate demand (aggregate = the whole economy) ___________ and aggregate supply ___________ the same, ___________ will occur.
- Demand-side inflation occurs when an _______________ in the price level originates on the demand side of the economy. Demand-side inflation can be caused by an increase in the _______________.
- Supply-side inflation occurs when an increase in the price level originates on the supply side of the economy.

The Effects of Inflation
- Inflation increases the _______________ that people must ______________ on particular goods or services. It can affect people on fixed incomes, savers, and partners in contracts.
  - Inflation reduces the buying power of people on **fixed incomes**, such as _______________ or _______________ proceeds.
  - If the inflation rate is _______________ than the interest rate earned on savings accounts, the money in those accounts loses _______________. As time goes on, savers will be able to buy fewer goods with the same amount of money.
  - Over time, inflation can eat up the _______________ factored into a long-term contract. As the costs of supplies and labor increase during the length of the project, the profit that was factored into the contract begins to disappear.
- To _______________ against inflation is to try to avoid or lessen a loss by taking some counterbalancing action. People try to figure out the best _______________ against inflation by investing in items such as gold, real estate, and art.
What Is Deflation?

- Deflation is the opposite of inflation. **Deflation** is a ____________ in the price level, or the average level of prices.
- A downward change in the CPI indicates deflation.

**Demand-Side Deflation Versus Supply-Side Deflation**

- Like inflation, deflation can result from a change in price or a change in supply. For example, if aggregate demand ________________ and aggregate supply **stays the same**, ______________ will occur.

**A Major Effect of Deflation**

- When prices fall, they do not all fall at the ______ time. When prices do not fall at the same time, deflation can lead to firms going out of ______________ and workers being _________ ________. These are common results during times of deflation.

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**Economics: Applying the Principles**

*Chapter 12: Economic Changes and Cycles*

In questions 1-4, calculate the percentage change in the CPI and then indicate whether inflation or deflation has occurred. Round answers to the nearest tenth of a percent.

1. In 1974, the CPI was 46.6, and in 1975, the CPI was 52.1.
   
   **Percentage change in CPI:** ___________________________
   
   **Inflation or deflation:** ___________________________

2. In 1949, the CPI was 24.0, and in 1950, the CPI was 23.5.
   
   **Percentage change in CPI:** ___________________________
   
   **Inflation or deflation:** ___________________________

3. In 1997, the CPI was 159.1, and in 1998, the CPI was 161.6.
   
   **Percentage change in CPI:** ___________________________
   
   **Inflation or deflation:** ___________________________

4. In 1930, the CPI was 17.1, and in 1931, the CPI was 15.9.
   
   **Percentage change in CPI:** ___________________________
   
   **Inflation or deflation:** ___________________________

5. Why is deflation often destructive to an economy?
   
   **Answer:** As prices fall, so does total revenue. This will cause businesses to fail and workers will be laid off.
What Is a Business Cycle?

- A business cycle includes _______________ swings (up and down) in real ________ of an economy. Economists usually talk about five phases of a business cycle.
  1. __________. At the peak of a business cycle, real GDP is at a temporary high.
  2. ______________. If real GDP decreases, the economy is said to be in contraction. A ______________ occurs when real GDP falls for ______ consecutive quarters.
  3. __________. The low point in real GDP, just before GDP turns up, is called the trough.
  4. _____________. The recovery is the period when real GDP is rising.
  5. _______________. The expansion refers to increases in real GDP beyond the recovery.

What Causes the Business Cycle?

- Between 1945 and 2005, the United States went through _____ business cycles. What causes a business cycle?

<table>
<thead>
<tr>
<th>Cause</th>
<th>How it leads to expansion</th>
<th>How it leads to contraction</th>
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<tbody>
<tr>
<td><strong>Money Supply</strong></td>
<td>An increase in the money supply means people buy more goods and services, leading to an economic expansion.</td>
<td>When the money supply drops or the growth rate in the money supply declines, people end up buying fewer goods and services, which leads to an economic contraction.</td>
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<td><strong>Business investment,</strong></td>
<td>When business or government spending increases, aggregate demand rises. The increase in employment leads to further increases in spending.</td>
<td>When business and government spending decrease, aggregate demand falls. The resulting decrease in employment leads to further decreases in spending.</td>
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<td><strong>residential construction,</strong></td>
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<td><strong>and government spending</strong></td>
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<td><strong>Politics</strong></td>
<td>Members of Congress may pass spending bills to improve their chances of reelection. This increase in spending increases aggregate demand, leading to economic expansion.</td>
<td>If inflation becomes a problem, politicians may cut spending to lower aggregate demand, which may lead to an economic contraction.</td>
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<td><strong>Innovation</strong></td>
<td>If a company develops a new technology or product, investment spending increases for the innovator’s competitors. The increase in investment spending leads to economic expansion.</td>
<td>Eventually, investment spending tends to slow and the economy contracts.</td>
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<td><strong>Supply shocks</strong></td>
<td>Supply shocks lead to economic contraction, not expansion</td>
<td>War and shortages of necessary resources reduce the productive capacity of an economy. The economy contracts, real GDP falls, and the unemployment rate rises.</td>
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Forecasting Business Cycles

• Let’s compare the economy to your health:
  1. In the first stage, you feel a little sluggish and tired. These feelings are ___________ indicators, letting you know that something may be wrong. In an economy, leading indicators ___________ economic upturns or downturns.

    Examples:

  2. When you are ill, you might have a bad headache or a stuffed-up nose. These are ___________ indicators, or indicators that coincide with your illness. In an economy, coincident indicators will ___________ economic upturns or downturns.

    Examples:

  3. When you are recovering from an illness, you may continue to experience a slight headache or a runny nose. These are ___________ indicators of your previous condition. The same holds true for members of an economy: they may notice indicators that lag ___________ economic upturns or downturns.

    Examples:

SECTION 3

Economic Growth

What Is Economic Growth?

• Absolute real economic growth is an increase in ___________ GDP from one period to the next.
• Per capita real economic growth is an increase in per capita real GDP from one period to the next. Per capita real GDP is real GDP divided by ___________.

Per Capita Real GDP Growth and the Rule of 72

• The Rule of 72 states that the amount of time it would take for any variable to ___________ is equal to 72 divided by the variable’s percentage ___________ rate.
• For example, if a variable is growing at 10 percent, it will double in 7.2 years: 72 divided by 10 equals 7.2.

Economic Growth and a Production Possibilities Frontier

• The production possibilities frontier (PPF) shows us _______ possible combinations of _______ goods that an economy can produce in a certain period of time.
• Using a PPF, we can show what ___________ economic growth looks like.
  o An economy can grow from a point ___________ the PPF because some resources in the economy are currently ___________.
  Movement from a point below the PPF to a point on the PPF is ___________ of economic growth. Real GDP is higher at the point ______ the PPF than it is at the point ______ the PPF.
  o When an economy already resides on the PPF, the only way for it to experience economic growth is by ___________ the frontier to the ___________.


What Causes Economic Growth?

- Factors that cause economic growth include natural resources, labor, capital, human capital, technological advances, and incentives.
  - With more natural resources, a country can produce ________ goods and services.
  - With more labor, a country can produce more ____________. An increase in ___________ of existing labor will also cause economic growth.
  - Capital investment can lead to increases in __________ productivity and therefore lead to increases in output or real GDP.
  - Human capital can also affect economic growth. Human capital is the ___________ and ___________ that people use in the production of goods and services. Human capital includes honesty, creativity, and perseverance—traits that lend themselves to finding work.
  - Technological advances can make it possible to obtain more __________________ from the ___________ amount of resources. Technological advances may result from new capital goods or new ways of producing goods.
  - Some economists argue that economic growth develops where people are given the ___________ to produce and innovate.

Two Worries About Future Economic Growth

- Growth can come at a great cost. Economic growth may mean more ___________, more __________, and more ___________ cities, along with increased social and psychological issues.
- Continued economic and population growth may bring us to a time when there is no clean air or water, and no land for people to live on comfortably.

Per capita real GDP is often used as a measure of standard of living. Use the Rule of 72 to answer questions 39-42.

- If the annual growth rate of per capita real GDP is 1%, your standard of living will double in ________ years.
- If the annual growth rate of per capita real GDP is 2%, your standard of living will double in ________ years.
- If the annual growth rate of per capita real GDP is 3%, your standard of living will double in ________ years.
- If the annual growth rate of per capita real GDP is 4%, your standard of living will double in ________ years.
- If you could rule the United States for a day, what changes would you make to ensure future economic growth?
  _______________________________________________________________________________________
  _______________________________________________________________________________________
  _______________________________________________________________________________________
  _______________________________________________________________________________________
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