

**Introduction to Macroeconomics
Practice #3**

Multiple Choices

1. Babe Ruth, the famous baseball player, earned \$80 000 in 1931. Today, the best baseball players can earn 200 times as much as Babe Ruth in 1931. Are the best baseball players better off than Babe Ruth?
 - a. Yes, the best baseball players today are better off than Babe Ruth was in 1931 because they earn much more.
 - b. No, because prices have also risen.
 - c. It cannot be determined because one cannot make judgments about changes in the standard of living based on changes in prices and changes in incomes.
 - d. **It cannot be determined without additional information regarding increases in prices since 1931.**
2. How does a rise in the consumer price index affect a typical family?
 - a. **The typical family has to spend more dollars to maintain the same standard of living.**
 - b. The typical family can spend fewer dollars to maintain the same standard of living.
 - c. The typical family finds that its standard of living is not affected.
 - d. The typical family can offset the effects of rising prices by saving more.
3. Which of the following best defines the inflation rate?
 - a. the price level
 - b. the change in the price level
 - c. the price level divided by the price level in the previous period
 - d. **the percentage change in the price level from the previous period**
4. Which of the following agencies calculates the CPI?
 - a. the National Price Board
 - b. the Department of Weight and Measurements
 - c. **Statistics Canada**
 - d. the Ministry of Finance
5. What is the basket of goods used to construct the CPI?
 - a. a random sample of all goods and services produced in the economy
 - b. **the goods and services typically bought by consumers, according to Statistics Canada surveys**
 - c. goods and services weighted by the ratio of expenditures on them relative to the consumption component of GDP
 - d. the least and the most expensive goods and services in each major category of consumer expenditures

Table 6-1

Year	Peaches	Pecans
2012	\$14 per bushel	\$9 per bushel
2013	\$12 per bushel	\$14 per bushel

6. Refer to the Table 6-1. Suppose that the typical consumer basket consists of 5 bushels of peaches and 10 bushels of pecans and that the base year is 2012. What is the consumer price index for 2012?
 - a. **100**
 - b. 125
 - c. 160
 - d. 200
7. Refer to the Table 6-1. Suppose that the typical consumer basket consists of 5 bushels of peaches and 10 bushels of pecans and that the base year is 2012. What is the consumer price index for 2013?
 - a. 80
 - b. 100
 - c. **125**
 - d. 200
8. Refer to the Table 6-1. What was the inflation rate in 2013?
 - a. **25 percent**
 - b. 20 percent
 - c. 5 percent
 - d. 4 percent

9. If the price index in the first year was 90, in the second year was 100, and in the third year was 95, what did the economy experience?
- 10 percent inflation between the first and second years and 5 percent inflation between the second and third years
 - 10 percent inflation between the first and second years and 5 percent deflation between the second and third years
 - 11 percent inflation between the first and second years and 5 percent inflation between the second and third years
 - 11 percent inflation between the first and second years and 5 percent deflation between the second and third years
10. A Brazilian company produces soccer balls in Canada and exports all of them. If the price of the soccer balls increases, what happens to the GDP deflator and the CPI?
- The GDP deflator and the CPI both increase.
 - The GDP deflator is unchanged, but the CPI increases.
 - The GDP deflator increases, but the CPI is unchanged.
 - The GDP deflator and the CPI are both unchanged.
11. How do the CPI and the GDP deflator relate to each other?
- They generally move together, but occasionally diverge.
 - They generally show opposing patterns of movement.
 - They generally diverge, but sometimes move together.
 - They generally show unrelated patterns of movement.
12. You know that a chocolate bar cost five cents in 1962. You also know the CPI for 1962 and the CPI for today. Which of the following would you use to compute the price of the candy bar in today's prices?
- 5 cents \times (1962 CPI/ today's CPI)
 - 5 cents \times (1962 CPI/(today's CPI – 1962 CPI))
 - 5 cents \times (today's CPI/1962 CPI)
 - 5 cents \times today's CPI – five cents \times 1962 CPI
13. If the nominal interest rate is 5 percent and the rate of inflation is 10 percent, what is the real interest rate?
- 5 percent
 - 2 percent
 - 2 percent
 - 5 percent
14. What does the nominal interest rate tell you?
- how fast the number of dollars in your bank account rises over time
 - how fast the purchasing power of your bank account rises over time
 - the number of dollars in your bank account
 - the purchasing power of your bank account
15. Samantha deposits \$2000 into a saving account that pays an annual interest rate of 5 percent. Over the course of a year, the inflation rate is 2 percent. What happens at the end of the year?
- Samantha has \$100 more in her account, and her purchasing power has increased by about \$40.
 - Samantha has \$100 more in her account, and her purchasing power has increased by about \$60.
 - Samantha has \$140 more in her account, and her purchasing power has increased about \$100.
 - Samantha has \$140 more in her account, and her purchasing power has increased about \$40.

Short Answers

1. Which is likely to have the larger effect on the CPI, a 2 percent increase in food or a 3 percent increase in diamond rings? Explain.

ANS:

The 2 percent increase in food will increase the CPI by more because the portion of the market basket that is for food is much larger than the portion for diamond rings.

2. List the three major problems in using the CPI as a measure of the cost of living

ANS:

(1) *Substitution bias*. The CPI ignores the fact that consumers substitute toward goods that have become relatively less expensive.

(2) *Introduction of new goods*. Because the CPI uses a fixed basket of goods, it does not take into account the increased well-being of consumers created when new goods are introduced.

(3) *Unmeasured quality change*. Not all quality changes can be measured.

3. Jay and Joyce meet George, the banker, to work out the details of a mortgage. They all expect that inflation will be 2 percent over the term of the loan, and they agree on a nominal interest rate of 6 percent. As it turns out, the inflation rate is 5 percent over the term of the loan.

- a. What was the expected real interest rate?
- b. What was the actual real interest rate?
- c. Who benefitted and who lost because of the unexpected inflation?

ANS:

a. The expected real interest rate was 4 percent.

b. The actual real interest rate was 1 percent.

c. George, the banker, lost because he receives less real interest income than he expected. Jay and Joyce gain because they pay less real interest expense than they expected.