

1. If the total expenditures of a typical family equaled \$35,000 per year in 2000 and the exact same basket of goods and services cost \$40,000 in the year 2005, the family's cost of living:

- A. increased by 14 percent.
- B. decreased by 12.5 percent.
- C. decreased by 14 percent.
- D. increased by 12.5 percent.

$$\frac{5}{35} = 0.14$$

2. If the Consumer Price Index increased from 1.52 to 1.65, then it must be the case that _____ relative to prices in the base year.

- A. all prices rose
- B. the weighted average level of prices rose
- C. all prices fell
- D. some prices rose and some prices fell

3. A consumer expenditure survey reports the following information on entertainment spending:

	2005		2006	
	Price	Quantity	Price	Quantity
Movies	\$7	5	\$8	7
Concerts	\$30	2	\$35	2
CDs	\$16	7	\$15	10

Using 2005 as the base year, by how much does a "cost of entertainment" index increase between 2005 and 2006?

- A. 3.86%
- B. 8.65%
- C. 13.43%
- D. 29.41%

$$CPI \text{ in } 2006 = \frac{8(5) + 35(2) + 15(7)}{7(5) + 30(2) + 16(7)} = \frac{215}{207} = 1.0386$$

4. A CPI that equals 1.34 in 2005 (when 2000 is the base year) means that:

- A. prices in 2005 are 34 percent higher than in 2004.
- B. the CPI equals 1.34 in 2000.
- C. the inflation rate in 2005 is 134 percent.
- D. the average level of prices is 34 percent higher in 2005 than in the base year.

5. The CPI in 1930 equaled 0.17. The CPI in 1931 equaled 0.15. The rate of inflation between 1930 and 1931 was _____ percent.

- A. -13.3
- B. -11.8
- C. 1.5
- D. 13.3

$$\frac{0.15 - 0.17}{0.17} = -0.118$$

6. The price of a gallon of gasoline at the pump increased by 10 percent at the same time that the inflation rate was 15 percent. The nominal price of gasoline ↑ and the real price of gasoline ↓.

- A. increased; increased
- B. increased; decreased
- C. increased; did not change
- D. decreased; increased

$$r = i - \pi$$

$$r = 10 - 15 = -5$$

7. A year's tuition at a state university cost \$250 in 1972 when the CPI equaled 0.418. The cost of a year's tuition at the same state university cost \$3000 in 2005 when the CPI equaled 1.68. The real cost of tuition between 1972 and 2005:

- A. increased.
- B. decreased.
- C. remained constant.
- D. may have either increased or decreased.

$$1972: \frac{\text{Nominal}}{\text{CPI}} = \text{Real} \quad \frac{250}{0.418} = 598$$

$$2005: \frac{3000}{1.68} = 1785$$

8. A report indicated that the average real wage in manufacturing declined by 2% between 1990 and 2000. If the CPI equaled 1.30 in 1990, 1.69 in 2000, and the average nominal wage in manufacturing was \$35 in 2000, what was the average nominal wage in manufacturing in 1990?

- A. \$20.71
- B. \$21.12
- C. \$26.92
- D. \$27.46

1990: CPI = 1.30 $N = 21.13(1.3) = \$27.47$

2000: CPI = 1.69 $N = 35$

$$\frac{20.71 - x}{x} = -0.02$$

$$20.71 = 0.98x$$

$$x = \text{RW } 1990 = 21.13$$

$$\frac{35}{1.69} = \$20.71 \text{ RW } 2000$$

9. A labor contract provides for a first-year wage of \$10 per hour, and specifies that the real wage will rise by 3 percent in the second year of the contract and by another 3 percent in the third year. The CPI is 1.00 in the first year, 1.07 in the second year, and 1.15 in the third year. What dollar wage must be paid in the third year?

- A. \$10.00
- B. \$10.61
- C. \$11.15
- D. \$12.20

1: \$10 1.0
2: \$10.30 1.07
3: \$10.61 1.15

$$N = 1.15(10.61) = \$12.2$$

10. The ~~Roskin~~ Commission's concluded that the CPI _____ the true inflation rate by 1 to 2 percent points. If this is correct then the actual improvement in living standards over time is _____.

- A. understates; overestimated
- B. understates; underestimated
- C. overstates; underestimated
- D. measures; overestimated

Ex: CPI says $\pi = 3$ when it really equals 2
If $i = 6$ then CPI says $r = 6 - 3 = 3$
when r should be 4

11. Inflation in the health-care sector apparently is overstated because the CPI does not adequately adjust for _____ changes.

- A. price
- B. quality
- C. volume
- D. quantity

12. If the price of motel rooms increases by 10% while the prices of other goods and services increase by 5 % on average, the relative price of motel rooms has:

- A. increased.
- B. decreased by 5%.
- C. increased by 2%.
- D. remained constant.

13. Joy's Java Café needs \$4,000 cash per day for customer transactions. Joy has a choice between going to the bank first thing on Monday morning to withdraw \$20,000 - enough cash for the whole week - or going to the bank first thing every morning for \$4,000 each time. Joy puts the cost of going to the bank at \$3 per trip. Assume that funds left in the bank earn precisely enough interest to keep their purchasing power unaffected by inflation. Joy's Java Cafe is open 5 days a week for 50 weeks each year. When the inflation rate is 10% Joy goes to the bank everyday instead of once a week. Joy's annual shoe leather costs of inflation equal _____.

- A. \$3
- B. \$150
- C. \$600
- D. \$750

50 trips no inflation
5(50) = 250 trips with inflation
So, she makes 250 - 50 = 200 trips
200 (\$3) = \$600

14. On January 1, 2004, Anna invested \$5,000 at 5% interest for one year. The CPI on January 1, 2004 stood at 1.60. On January 1, 2005, the CPI was 1.68. The real rate of interest earned by Anna was _____ percent.

- A. -5
- B. 0
- C. 5
- D. 8

$r = ?$
 $i = 5\%$
 $\pi = 5\%$

$$\frac{1.68 - 1.60}{1.60} = \pi = 5\%$$

$$r = i - \pi = 5\% - 5\% = 0$$

15. To counteract inflation, the government could implement all of the following EXCEPT:

- A. monetary policy.
- B. fiscal policy.
- C. polices that affect the supply and demand for a specific good.
- D. policies that affect the supply and demand for all goods and services.