## Microeconomics, $9 e$ (Pindyck/Rubinfeld) <br> Chapter 1 Preliminaries

### 1.1 The Themes of Microeconomics

1) Microeconomics is the branch of economics that deals with which of the following topics?
A) The behavior of individual consumers
B) Unemployment and interest rates
C) The behavior of individual firms and investors
D) B and C
E) A and C

Answer: E
Diff: 1
Section: 1.1
2) A Rolling Stones song goes: "You can't always get what you want." This echoes an important theme from microeconomics. Which of the following statements is the best example of this theme?
A) Consumers must make the best purchasing decisions they can, given their limited incomes.
B) Workers do not have as much leisure as they would like, given their wages and working conditions.
C) Workers in planned economies, such as North Korea, do not have much choice over jobs.
D) Firms in market economies have limited financial resources.

Answer: A
Diff: 1
Section: 1.1
3) This textbook is about microeconomics because it deals mainly with the behavior of variables such as:
A) national output, interest rates, unemployment and inflation.
B) individual economic units, such as consumers, firms, workers and investors.
C) national and international markets, exchange rates and economic treaties.
D) economic sectors, the business cycle and monetary and fiscal policies.

Answer: B
Diff: 1
Section: 1.1
4) The problem of scarcity means that people face trade-offs. Which of the following trade-offs are the concern of microeconomics?
A) Trade-offs faced by consumers in the purchase of goods
B) Trade-offs faced by workers between work and leisure
C) Trade-offs faced by firms in what goods to produce
D) all of the above

Answer: D
Diff: 1
Section: 1.1
5) The textbook argues that one of the trade-offs workers make is working for a small company or a large company. The small companies offer:
A) job security but limited potential for advancement.
B) more potential for advancement but limited job security.
C) both job security and ample potential for advancement.
D) benefits that appeal to the workers that do not include job security or career advancement.

Answer: B
Diff: 1
Section: 1.1
6) A valid and useful theory of gold prices:
A) helps to explain and predict the movements of gold prices over time.
B) very likely relies on complex assumptions.
C) very likely includes as many details as possible about gold prices.
D) all of the above

Answer: A
Diff: 2
Section: 1.1
7) Use the following two statements to answer this question:
I. Economic theories are developed to explain observed phenomena by deducing from a set of basic rules and assumptions.
II. Economic theories use value judgments to determine which people ought to pay more taxes.
A) Both I and II are true.
B) I is true, and II is false.
C) I is false, and II is true.
D) Both I and II are false.

Answer: B
Diff: 1
Section: 1.1
8) Which of the following is a positive statement?
A) The President of the United States ought to be elected by a direct vote of the American people rather than the Electoral College.
B) When a country imports more than it exports, its balance of trade is negative.
C) Because many adults cannot afford to go to college, tax credits for tuition should be introduced.
D) The price of drugs in the United States is too high.
E) It only makes sense to offer financial aid for students who cannot pay some of their tuition.

Answer: B
Diff: 1
Section: 1.1
9) Which of the following is a normative statement?
A) The taxes paid by the poor should be reduced in order to improve the income distribution in the U.S.
B) State governments should not subsidize corporations by training welfare recipients.
C) Presidential candidates should not be given funds from the federal government to run campaigns.
D) The sea otter should not be allowed to spread into Southern California coastal waters, because it will reduce the value of fisheries.
E) all of the above

Answer: E
Diff: 1
Section: 1.1
10) Which of the following is a positive statement?
A) Intermediate microeconomics should be required of all economics majors in order to build a solid foundation in economic theory.
B) The minimum wage should not be increased because this action would increase unemployment.
C) Smoking should be restricted on all airline flights.
D) All automobile passengers should be required to wear seatbelts in order to protect them against injury.
E) none of the above

Answer: E
Diff: 1
Section: 1.1
11) Which of the following is a positive statement?
A) When the price of a good goes up, consumers buy less of it.
B) When the price of a good goes up, firms produce more of it.
C) When the Federal government sells bonds, interest rates rise and private business investment is reduced.
D) all of the above
E) none of the above

Answer: D
Diff: 1
Section: 1.1
12) Which of the following statements is false? An economic analysis of carbon taxes can:
A) calculate the increase in costs faced by coal-using industries.
B) predict the effect on unemployment in West Virginia coal mining communities.
C) compare the likely reductions in medical expenditures on diseases caused by smog.
D) present a trade-off of the costs and benefits of different levels of carbon taxes.
E) conclude that such taxes should be imposed to benefit future generations.

Answer: E
Diff: 1
Section: 1.1
13) Use the following two statements to answer this question:
I. In order to answer normative questions, it is necessary to make value judgments.
II. In order to conduct positive economic analysis, it is always necessary to use empirical evidence in addition to economic theories.
A) I and II are incorrect.
B) I is correct, II is incorrect.
C) I is incorrect, II is correct.
D) Both I and II are correct.

Answer: B
Diff: 1
Section: 1.1
14) $\qquad$ questions have to do with explanation and prediction; $\qquad$ questions have to do with what ought to be.
A) Positive; negative.
B) Negative; normative.
C) Affirmative; positive.
D) Positive; normative.
E) Econometric; theoretical.

Answer: D
Diff: 1
Section: 1.1
15) The key assumption underlying the theory of the firm is that:
A) firms are assumed to maximize sales revenue.
B) managers are assumed to maximize the number of employees in their department.
C) firms are assumed to maximize profits.
D) none of the above

Answer: C
Diff: 1
Section: 1.1
16) Use the following statements to answer this question:
I. The process of testing and revising theories is central to the development of economics as a science.
II. Theory is imperfect and may not adequately describe economic behavior in some cases.
A) I and II are true.
B) I is true and II is false.
C) I is false and II is true.
D) I and II are false.

Answer: A
Diff: 1
Section: 1.1
17) The trade-offs facing consumers include:
A) how to allocate income across goods and serves.
B) how to allocate income between current consumption and future consumption.
C) both A and B
D) none of the above

Answer: C
Diff: 1
Section: 1.1
18) Firms face trade-offs in production, including decisions related to:
A) which products to produce.
B) how much of a particular product to produce.
C) the best way to produce a given amount of output.
D) all of the above

Answer: D
Diff: 2
Section: 1.1
19) The basic premise behind worker trade-offs in a market economy is that:
A) firms decide how much workers must work and workers decide how much leisure to have.
B) workers don't decide how much leisure to have. The amount of leisure depends on the number of hours they must work, which is determined by the firm.
C) workers decide how to allocate their time between work and leisure.
D) the trade-off between work and leisure is determined by factors other than what workers or firms would determine to be optimal.
Answer: C
Diff: 2
Section: 1.1
20) During a presidential campaign, the candidates from each party typically describe their plans to maintain or change federal taxes on personal and business income. Are these policy statements generally positive or normative in nature?
A) Positive
B) Normative
C) Both positive and normative
D) Neither positive or normative

Answer: B
Diff: 2
Section: 1.1
21) Which of the following is a normative question about an initiative to impose a new tax?
A) What is the expected impact on producers and consumers?
B) How much revenue is the tax expected to raise?
C) Is the tax considered to be in the public interest?
D) All of the above are normative considerations.

Answer: C
Diff: 1
Section: 1.1

### 1.2 What Is a Market?

1) Which of the following markets has the most restrictive geographic boundary?
A) The market for retail gasoline
B) The market for housing
C) The market for gold
D) The market for beef

Answer: B
Diff: 1
Section: 1.2
2) In the definition of a market, economists consider:
A) only actual interactions between buyers and sellers, not potential interactions.
B) both actual and potential interactions between buyers and sellers.
C) neither actual nor potential interactions between buyers and sellers.
D) actions by third parties that do not include buyers or sellers in the market.

Answer: B
Diff: 1
Section: 1.2
3) An investor can acquire shares of stock in Acme Corporation either by purchasing shares on the stock market or by purchasing a bond that is convertible into shares of Acme stock. After careful study, the investor discovers that she can profit by purchasing the bond, converting it to shares of stock, and selling the stock. This practice is called:
A) selling short.
B) arbitrage.
C) profiteering.
D) dumping.
E) none of the above

Answer: B
Diff: 1
Section: 1.2
4) Use the following two statements to answer this question:
I. A market is a collection of buyers and sellers that, through actual or potential interactions, determine the price for a product or set of products.
II. An industry is a collection of markets for similar or closely related products.
A) Both I and II are true.
B) I is true, and II is false.
C) I is false, and II is true.
D) Both I and II are false.

Answer: B
Diff: 1
Section: 1.2
5) In a perfectly competitive market:
A) there are a few buyers.
B) there is a single seller.
C) there is a cartel.
D) no single buyer or seller can significantly affect the market price.

Answer: D
Diff: 1
Section: 1.2
6) Boeing Corporation and Airbus Industries are the only two producers of long-range commercial aircraft. This market is not perfectly competitive because:
A) each company has annual sales over $\$ 10$ billion.
B) each company can significantly affect prices.
C) Airbus receives subsidies from the European Union.
D) Airbus cannot sell aircraft to the United States government.
E) all of the above

Answer: B
Diff: 1
Section: 1.2
7) Which of the following markets are competitive enough to be treated as perfectly competitive?
A) Agricultural markets
B) Copper
C) The U.S. airline industry
D) Coal, iron, tin and lumber
E) all of the above

Answer: E
Diff: 1
Section: 1.2
8) Although the U. S. airline industry has only a relatively small number of sellers, the market is nevertheless highly competitive. The reason is that:
A) the number of buyers is very large.
B) due to fierce competition, no firm has significant control over prices.
C) due to fierce competition, no firm has significant control over the quantity supplied.
D) most airline routes are served by relatively many sellers.

Answer: B
Diff: 2
Section: 1.2
9) Washington, D.C.'s metro train system is being extended further into the neighboring states of Maryland and Virginia, thereby reducing the cost of commuting into the United States' capitol. Other things being held constant, this can be expected to:
A) decrease the extent of the market for housing around Washington, D.C.
B) increase the extent of the market for housing around Washington, D.C.
C) have no effect on the extent of the market for housing around Washington, D.C. as the actual geography remains unchanged.
D) have no effect on the extent of the market for housing around Washington, D.C. as the range of houses available has not changed.
E) have no effect on the extent of the market for housing around Washington, D.C. as property taxes have not changed.
Answer: B
Diff: 2
Section: 1.2
10) Why is market definition important for economic decision making?
A) A firm is interested in knowing its actual and potential competitors.
B) A firm will define its market in order to maximize revenue.
C) Government regulators are interested in knowing the effect of mergers and acquisitions on competition and prices in a particular market.
D) both A and C
E) both A and B

Answer: D
Diff: 1
Section: 1.2
11) Which of the following features are relevant for determining the extent of a market?
A) Its geographical boundaries
B) Technological innovations that would reduce the cost of production
C) The range of products to be included in it
D) both A and B
E) both A and C

Answer: E
Diff: 1
Section: 1.2
12) Which of the following statements about markets and industries is TRUE?
A) A market includes buyers but not sellers.
B) A market includes sellers but not buyers.
C) An industry includes buyers but not sellers.
D) An industry includes sellers but not buyers.

Answer: D
Diff: 1
Section: 1.2
13) Although there are many reasons why a market can be non-competitive, the principal economic difference between a competitive and a non-competitive market is:
A) the number of firms in the market.
B) the extent to which any firm can influence the price of the product.
C) the size of the firms in the market.
D) the annual sales made by the largest firms in the market.
E) the presence of government intervention.

Answer: B
Diff: 1
Section: 1.2
14) Which of the following could not possibly be included in the same market as Coke?
A) Pepsi
B) Gatorade
C) Milk
D) Bread

Answer: D
Diff: 1
Section: 1.2
15) Use the following statements to answer this question:
I. Political candidates need to know the geographical extent of the market for TV commercials in determining how to reach the target number of eligible voters with the smallest possible expenditure.
II. The geographical extent of the market for gasoline in Texas will determine whether an oil company drills for oil there.
A) I and II are true.
B) I is true, and II is false.
C) I is false, and II is true.
D) I and II are false.

Answer: B
Diff: 1
Section: 1.2
16) Which of the following assertions, if proven true in a court of law, would help Archer-DanielsMidland, a maker of corn syrup, in its attempt to acquire another corn syrup producer, the Clinton Corn Processing Company?
A) Archer-Daniels-Midland is a dominant producer of corn syrup.
B) There are no good substitutes for corn syrup for any of its major uses.
C) Archer-Daniels-Midland and the Clinton Corn Processing Company together hold only a small share of the market for sweeteners including corn syrup and sugar.
D) Archer-Daniels-Midland produces many other different agricultural products, in addition to corn syrup.
Answer: C
Diff: 1
Section: 1.2
17) Use the following statements to answer this question:
I. If the extent of a market is broader, it is less likely that firms in the market can influence the market price.
II. In determining whether two different products belong to the same market, it is necessary to know whether the two products can be used as substitutes for each other.
A) I and II are both false.
B) I is false, and II is true.
C) I is true, and II is false.
D) I and II are both true.

Answer: D
Diff: 2
Section: 1.2
18) Use the following statements to answer this question:
I. The price for a given product may differ across sellers if the market is not perfectly competitive.
II. A single "market price" does not exist in imperfectly competitive markets.
A) I and II are true.
B) I is true and II is false.
C) II is true and I is false.
D) I and II are false.

Answer: B
Diff: 2
Section: 1.2
19) Suppose you are in charge of product pricing and marketing strategy for a pharmaceutical company. You will have greater ability to independently set prices for your product if:
A) there are no close substitutes for your product.
B) there are lots of other firms selling closely related products in your market.
C) your market is perfectly competitive.
D) none of the above

Answer: A
Diff: 2
Section: 1.2
20) To arbitrage a price difference between two markets, you should:
A) sell in the low-price market and buy in the high-price market.
B) buy in the low-price market and sell in the high-price market.
C) sell in both markets to capture a lower average "market price."
D) none of the above

Answer: B
Diff: 2
Section: 1.2
21) Arbitraging price differences between two markets is generally not possible if:
A) there are positive costs of transporting the products from one market to the other.
B) the transportation costs are larger than the difference in prices.
C) the government has prohibited exchange between the two markets.
D) A and C above
E) B and C above

Answer: E
Diff: 2
Section: 1.2
22) Which of the following statement is FALSE?
A) Perfectly competitive markets are composed of many buyers and sellers.
B) Some markets may have only a few sellers but exhibit the properties of perfect competition.
C) A market may be composed of only one buyer and one seller.
D) All of the above statements are correct.

Answer: D
Diff: 2
Section: 1.2
23) From Example 1.2 in the textbook, Pindyck and Rubinfeld distinguish between the mass market and dealer market for bicycles. Although there are many dealers in the U.S. and only a few mass merchandisers, we should expect the dealer market to be somewhat less competitive than the mass market. Why?
A) Due to their differences in quality and performance, dealer bicycles are not close substitutes.
B) The geographic extent of the market for dealer bicycles is typically small, so the individual sellers do not have many local competitors.
C) Dealers are small sellers and have little control over bicycle prices.
D) A and B are correct.
E) B and C are correct.

Answer: D
Diff: 2
Section: 1.2
24) Suppose the price of crude oil is $\$ 95$ per barrel in New York and $\$ 85$ per barrel in Texas, and the transaction costs for trading between the two markets are $\$ 15$ per barrel. What actions should you take to arbitrage this price difference?
A) Buy oil in Texas and sell oil in New York
B) Sell oil in Texas and buy oil in New York
C) Buy oil in both markets and wait for higher prices
D) Do not buy or sell oil in either market

Answer: D
Diff: 2
Section: 1.2
25) A key factor that determines the geographic extent of a housing market is the distance that commuters are willing to travel from home to work. Which of the following events would NOT help to expand the geographic extent of the housing market in a metropolitan area?
A) Price of gasoline declines
B) State gasoline tax increases
C) Public transit fares decrease
D) none of the above

Answer: B
Diff: 2
Section: 1.2

### 1.3 Real versus Nominal Prices

1) The "constant dollar" price is:
A) the real price of a good.
B) the nominal price of a good adjusted for inflation.
C) the "current dollar" price adjusted for inflation.
D) all of the above
E) none of the above

Answer: D
Diff: 1
Section: 1.3
2) What does it mean when the CPI is higher this year than last?
A) The rate of inflation has increased.
B) There has been inflation since last year.
C) Real prices have increased.
D) Real prices have decreased.

Answer: B
Diff: 1
Section: 1.3
3) The price of a taco was $\$ 0.29$ in 1970 and $\$ 1.09$ in 2017. The CPI was 38.8 in 1970 and 172.2 in 2017. The 2017 price of a taco in 1970 dollars is:
A) $\$ 0.25$.
B) $\$ 0.29$.
C) $\$ 1.09$.
D) $\$ 4.84$.

Answer: B
Diff: 2
Section: 1.3
4) Since last year, the price of gold has risen from $\$ 1100$ to $\$ 1420$. What annual inflation rate would leave the real price of gold unchanged over the last twelve months?
A) Approximately $29 \%$
B) $40 \%$
C) Approximately $71 \%$
D) $320 \%$
E) none of the above

Answer: A
Diff: 2
Section: 1.3
5) Over the past year, price inflation has been $10 \%$, but the price of a used Ford Escort has fallen from $\$ 6,000$ to $\$ 5,000$. The real price of a Ford Escort has fallen by:
A) $12 \%$.
B) $17 \%$.
C) $20 \%$.
D) $24 \%$.
E) $32 \%$.

Answer: D
Diff: 2
Section: 1.3
6) Suppose the nominal price of gasoline was $\$ 0.90$ per gallon in 1987. To convert this value to the real price of 1987 gasoline in 2017 dollars, we should:
A) multiply by the 1987 CPI and divide by the 2017 CPI.
B) multiply by the 2017 CPI and divide by the 1987 CPI.
C) not do anything because this is the real price in 2017 dollars.
D) none of the above

Answer: B
Diff: 1
Section: 1.3
7) The nominal price of industrial red paint was $\$ 12$ per gallon in 1993. To convert this value to the real price of paint in 2017 dollars, we should use the:
A) Consumer Price Index.
B) Producer Price Index
C) Fed funds rate.
D) 30-day T-bill rate.

Answer: B
Diff: 1
Section: 1.3
8) Which of the following goods is NOT a likely component of the Consumer Price Index?
A) Hamburger
B) 87 octane gasoline
C) Structural steel beams
D) Movie tickets

Answer: C
Diff: 1
Section: 1.3
9) Which price index published by the U.S. federal government represents wholesale price changes?
A) Consumer Price Index
B) Producer Price Index
C) GDP deflator
D) Dow-Jones Industrial Average

Answer: B
Diff: 1
Section: 1.3
10) When 1983 is the CPI base year, the CPI value is 82.4 for 1980 and 172.2 for 2017 . Suppose we want to convert this CPI series to have a base year of 2017 (that is, $\mathrm{CPI}_{2017}=100$ ). What is the value of the revised CPI for 1980?
A) 172.2
B) 100
C) 47.9
D) 209.0

Answer: C
Diff: 2
Section: 1.3
11) Use the following statements to answer this question:
I. The inflation rate (the rate of change in the general price level) calculated from a price index like CPI is the same regardless of the base year we use to form the price index.
II. Although the CPI may indicate the general price level increased by $5 \%$ last year, there are some consumer products that may have experienced more or less inflation in the past year.
A) I and II are true.
B) I is true and II is false.
C) I is false and II is true.
D) I and II are false.

Answer: A
Diff: 1
Section: 1.3
12) Which price index published by the U.S. federal government represents retail price changes?
A) Consumer Price Index
B) Producer Price Index
C) GDP deflator
D) Dow-Jones Industrial Average

Answer: A
Diff: 1
Section: 1.3
13) Suppose the Social Security Administration would like to guarantee the purchasing power of social security payments to the elderly does not diminish. That is, the real value of the payments does not decrease. The CPI in 1990 was 130.7 and the CPI in 1998 was 163.0. How much does the Social Security Administration need to increase payments from 1990 to 1998 to accomplish this objective?
Answer: The change in the general price level is $100(163-130.7) / 130.7=25 \%$. Thus, the level of payments in 1998 need to be $\mathrm{P}(1990) *(1+0.25)$.
Diff: 2
Section: 1.3
14) Suppose the minimum wage was $\$ 0.25$ per hour in 1938 and the CPI in that year was 11.5 . If the CPI in 1990 was 130.7, what is the real value of the 1938 minimum wage in terms of 1990 dollars? The real value of the 1990 minimum wage in terms of 1990 dollars is $\$ 4.25$. Has the real value of the minimum wage declined since 1938?
Answer: $\mathrm{W}(1938)=130.7(\$ 0.25) / 11.5=\$ 2.84$, so the real value of the minimum wage has increased from 1938 to 1990.
Diff: 1
Section: 1.3
15) The reward for the capture of Jesse James was $\$ 500.00$ in 1881. Suppose the CPI in 1881 was 0.25 . What is the real value of the reward in 2010 dollars if the CPI was 218.1 in 2010?
Answer: $218.1(\$ 500) / 0.25=218.1(\$ 2,000)=\$ 436,200$.
Diff: 1
Section: 1.3
16) The CPI in 1970 was 38.8 and in 1998 the CPI was 163.0. If the real value of a 1970 gallon of milk in terms of 1998 dollars is $\$ 0.70$, what was the nominal price of milk in 1970?
Answer: 38.8(\$0.70)/163 = \$0.17.
Diff: 2
Section: 1.3
17) The nominal price of milk was $\$ 2.25$ in 1998 while the CPI was 163.0 that year. Also, the CPI in 1970 was 38.8. What was the real value of 1998 milk in terms of 1970 dollars?
Answer: 38.8(\$2.25)/163 = \$0.54.
Diff: 2
Section: 1.3
18) The nominal price of a 1990 laptop was $\$ 3,500$ and the CPI that year was 130.7. The nominal price of a laptop in 2010 was $\$ 600$ and the CPI that year was 218.1. What is the real price of a 2010 laptop in terms of 1990 dollars? By what percent has the real price of laptops changed?
Answer: $130.7(\$ 600) / 218.1=\$ 360$. Percent decline in the real value of laptops:
$-100(\$ 360-\$ 3,500) / \$ 3,500=\$ 3,140(100) / \$ 3,500=89.71 \%$
Diff: 2
Section: 1.3
19) The price to attend a NBA basketball game in Chicago is $\$ 55$ while the CPI in Chicago is 153 . The CPI in Charlotte is 108 while the price to attend a NBA basketball game is $\$ 52$. Which city offers a smaller real cost of attending a NBA basketball game?
Answer: Chicago real value[NBA(Charlotte)] $=153(52) / 108=\$ 73.67$. The real value of a game in Charlotte exceeds the real value of a game in Chicago. Chicago offers a smaller real cost of attending a game.
Diff: 2
Section: 1.3
20) The first column of the following table describes the price movement of AOL Corporation stock over a five-year period. The second column gives the period's consumer price index. Calculate the real value of the stock for each time period using year 5 as the base year. If you purchased $\$ 1,000$ worth of AOL Corporation in year 1, what has happened to the purchasing power of your original $\$ 1,000$ investment when you sell the stock in year 5 ?

| Year | AOL | CPI |
| :---: | :---: | :---: |
| $\mathbf{1 9 9 6}$ | $\$ 4.00$ | 147.8 |
| $\mathbf{1 9 9 7}$ | $\$ 3.84$ | 155.3 |
| $\mathbf{1 9 9 8}$ | $\$ 7.00$ | 163.0 |
| $\mathbf{1 9 9 9}$ | $\$ 37.00$ | 165.4 |
| $\mathbf{2 0 0 0}$ | $\$ 70.00$ | 172.1 |

Answer:

| Year | Real AOL Stock Price <br> in 2000 Dollars |
| :---: | :---: |
| $\mathbf{1 9 9 6}$ | $\$ 4.66$ |
| 1997 | $\$ 4.26$ |
| $\mathbf{1 9 9 8}$ | $\$ 7.39$ |
| $\mathbf{1 9 9 9}$ | $\$ 38.50$ |
| $\mathbf{2 0 0 0}$ | $\$ 70.00$ |

The real value of a year 1996 dollar in 2000 is $172.1(\$ 1) / 147.8=\$ 1.16$. I would have bought 250 shares of AOL at 1996 prices (ignoring transaction costs) with the $\$ 1,000$. The value of the stock in the year 2000 is $(250(\$ 70))=\$ 17,500$. The change in my purchasing power is $(\$ 17,500-\$ 1,160) / \$ 1,160=14.09$. That is, my purchasing power from investing in the stock rises by 1,409\%.
Diff: 3
Section: 1.3
21) The following is a list of housing costs in five different countries along with their CPI. For which country is the real cost of housing declining? Use year 2 as the base year in your answer.

| Country | Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ |  |  | $\mathbf{y y}$ |
|  | Housing <br> Costs | CPI | Housing <br> Costs | CPI |
| Argentina | 37 | 121 | 32 | 97 |
| Egypt | 42 | 98 | 45 | 89 |
| Italy | 61 | 157 | 78 | 177 |
| Spain | 53 | 143 | 57 | 169 |
| United <br> States | 25 | 100 | 33 | 103 |

Answer: The real cost of housing in Spain has decreased. The real cost of year 1 housing in year 2 is $(169 / 143) 53=\$ 62.64$. This exceeds the real cost of year 2 housing in year $2, \$ 57.00$. Thus, housing costs have declined in Spain.
Diff: 2
Section: 1.3
22) For each city across the U.S., economists construct a price index for a similar basket of goods. In Los Angeles the index is 127.3 and the index for Dallas is 94.8 . If you have been offered $\$ 137,000$ for a job in Los Angeles and $\$ 117,000$ for a similar job in Dallas, which job affords you the highest purchasing power of the bundle of goods in the price index? Use the Los Angeles value as the base.
Answer: Real value[Dallas] = 127.3(\$117,000)/94.8 = \$157,111. This exceeds the real $\$ 137,000$ salary for the job in Los Angeles. The Dallas job provides higher purchasing power.
Diff: 2
Section: 1.3
23) Suppose we expect consumer prices to increase by about 30 percent between 2010 and 2020, and the minimum wage was $\$ 7.25$ per hour in 2010. What should be the minimum wage in 2020 if it is set to maintain the same purchasing power as in 2010?
A) $\$ 7.25$
B) $\$ 7.55$
C) $\$ 9.42$
D) none of the above

Answer: B
Diff: 2
Section: 1.3
24) The "core" inflation rate is typically defined as the change in consumer prices for all goods included in the CPI basket except energy and food products. Suppose the overall inflation rate based on the CPI was 4 percent for the past year, and energy and food prices did not change during the year. Is the core inflation rate for the past year higher or lower than 4 percent?
A) Higher
B) Lower
C) They are the same.
D) We do not have enough information to answer this question.

Answer: A
Diff: 2
Section: 1.3
25) We can approximate the real return on an investment by subtracting the inflation rate from the nominal return on the investment. For example, an investment that returns $10 \%$ per year while inflation is $4 \%$ per year has a real (inflation adjusted) return of approximately $6 \%$. Which of the following outcomes is NOT possible?
A) Nominal and real returns are positive.
B) Nominal return is positive, real return is negative.
C) Nominal return is negative, real return is positive.
D) All of these outcomes are possible.

Answer: D
Diff: 2
Section: 1.3
26) In real terms, which of the following has been declining over the last decade or so?
A) The minimum wage
B) The price of health care
C) The price of textbooks
D) None of the above. All of the above have been rising.

Answer: A
Diff: 2
Section: 1.3

### 1.4 Why Study Microeconomics?

1) Which of the following is NOT an example of ways in which microeconomic analysis can help Toyota Motor Corporation in its corporate decision making?
A) Forecasting demand for new automobiles
B) Determining how many automobiles to produce in order to maximize profits
C) Predicting how competitors will react to the firm's pricing strategy
D) Forecasting the effect of Toyota's hiring patterns on the U.S. unemployment rate
E) Forecasting the effect of an oil price increase on demand for hybrid autos

Answer: D
Diff: 1
Section: 1.4
2) Which of the following is NOT an example of a way in which microeconomic analysis can help in designing environmental policy?
A) Determining the optimal level of vehicle fuel efficiency standards
B) Designing laws to provide incentives for firms to implement clean technologies in new vehicles
C) Lobbying consumers and firms to reduce consumption of energy
D) Examining the trade-offs between ecological benefits of environmental legislation and its impacts on consumers' standard of living
Answer: C
Diff: 1
Section: 1.4
3) When Toyota introduced the new Prius in the United States, which of the following occurred?
A) The hybrid car was not as successful as expected.
B) Toyota confronted the risk of making large investments and the uncertainly over future oil prices.
C) The costs of manufacturing were too high and Toyota had to stop production.
D) All of the above

Answer: B
Diff: 1
Section: 1.4
4) Which considerations regarding regulatory policies were related to the production of the Toyota Prius in the United States?
A) Since the car was a hybrid, Toyota did not have to worry about federal emissions standards.
B) Toyota had to make sure it complied with health and safety regulations.
C) Since Toyota is a Japanese producer, the regulatory policies of the United States did not apply to its new cars.
D) All of the above

Answer: B
Diff: 1
Section: 1.4
5) To evaluate the potential impact of introducing the hybrid Prius auto into the U.S. market, Toyota Motor Corporation would use:
A) positive economic analysis.
B) normative economic analysis.
C) negative economic analysis.
D) forensic analysis.

Answer: A
Diff: 1
Section: 1.4
6) Which of the following administrations passed the Energy Independence and Security Act, which required auto makers to boost fleet wide gas mileage to 35 mpg by 2020 ?
A) Gerald Ford
B) Ronald Reagan
C) George W. Bush
D) Barack Obama

Answer: C
Diff: 1
Section: 1.4

