

Student name: _____

MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

Economics is best defined as the study of

inflation, interest rates, and the stock market.

supply and demand.

how people make choices in the face of scarcity and the implications of those choices for society as a whole.

the financial concerns of businesses and individuals.

Economics is best defined as the study of

the financial concerns of businesses and individuals.

the role of government in limiting the choices people make.

choice in the face of limited resources.

whether we will have enough resources in the future.

Economists recognize that because people have limited resources

government intervention is necessary.

they have to make trade-offs.

they will never be happy.

our future is bleak.

The Scarcity Principle states that

people don't have enough money to buy what they want.

society will eventually run out of resources.

with limited resources, having more of one thing means having less of another.

some countries have fewer resources than others.

An implication of scarcity is that

people will never be happy.

making trade-offs becomes unnecessary as wealth increases.

some people will always be poor.

people must make trade-offs.

If all the world's resources were to magically increase one hundredfold, then

people would still have to make trade-offs.

economics would no longer be relevant.

scarcity would disappear.

trade-offs would become unnecessary.

The Scarcity Principle applies to

poor people primarily.

consumers primarily.

firms primarily.

everyone.

Forest lives in complete isolation in Montana. He is self-sufficient and feeds himself through hunting, fishing, and farming. Which of the following statements about Forest is true?

Forest has unlimited resources.

Forest is not required to make trade-offs because he is self-sufficient.

Forest has to make trade-offs.

Forest doesn't have to consider costs and benefits.

The Scarcity Principle applies to

all decisions.

only market decisions, e.g., buying a car.

only non-market decisions, e.g., watching a sunset.

only the poor.

Chris has a one-hour break between classes every Wednesday. Chris can either stay at the library and study or go to the gym and work out. The decision Chris must make is

not an economic problem because neither activity costs money.

not an economic problem because it's an hour that Chris has no matter what he does.

an economic problem because the tuition Chris pays covers the cost of both the gym and the library.

an economic problem because Chris has only one hour, and engaging in one activity means giving up the other.

Jackie wants to go to the football game this weekend, but she has a paper due on Monday. It will take her the whole weekend to write the paper. Jackie decides to stay home and work on the paper. According to the Scarcity Principle, the reason Jackie doesn't go to the game is that

Jackie prefers schoolwork to football games.

writing the paper is easier than going to the game.

Jackie can't go to the game and finish the paper.

going to the game won't be fun.

Whether studying the output of the U.S. economy or how many classes a student will take, a unifying concept is that

wants are limited and resources are unlimited, so trade-offs are unnecessary.

wants are unlimited and resources are scarce, so trade-offs have to be made.

wants are limited and resources are unlimited, so trade-offs have to be made.

both wants and resources are unlimited, so trade-offs are unnecessary.

The Cost-Benefit Principle indicates that an action should be taken if

its total benefits exceed its total costs.

its average benefits exceed its average costs.

its net benefit (benefit minus cost) is zero.

its extra benefit is greater than or equal to its extra cost.

If a person takes an action if, and only if, the extra benefits from taking that action are at least as great as the extra costs, then that person is

not following the Cost-Benefit Principle.

following the Scarcity Principle.

following the Cost-Benefit Principle.

not rational.

Choosing to study for an exam until the extra benefit (e.g., improved score) equals the extra cost (e.g., the value of forgone activities) is

not an economic choice.

an application of the Cost-Benefit Principle.

an application of the Scarcity Principle.

not rational because it ignores the importance of total benefits and total costs.

The Scarcity Principle tells us _____, and the Cost-Benefit Principle tells us _____.

that choices must be made; how to make good choices

that good choices eliminate scarcity; how to make good choices

how to make choices; that choices must be made

how to make good choices; that choices involve costs and benefits

According to the Cost-Benefit Principle, you should go see the latest Fast and Furious movie with your friends this weekend if

the extra benefits of seeing the movie are greater than the extra costs of seeing the movie.

you really like action movies.

you can afford to go to the movies.

the average benefit you get from going to the movies is greater than the average cost of a ticket.

A rational person

makes choices based on total benefits and total costs.

makes choices based on added benefits and added costs.

undertakes activities until the net benefits become less than zero.

considers the financial benefits and financial costs of making a choice.

Suppose that the extra cost to Ava of a third glass of soda is zero because she's at a restaurant that gives free refills. According to the Cost-Benefit Principle Ava should

drink a third glass of soda.

drink a third glass of soda if the extra benefit of doing so is positive.

drink a third glass of soda if her total benefit from drinking soda is positive.

not drink a third glass of soda.

Yoshi must choose to either mow the lawn or wash clothes. If he mows the lawn, he will earn \$30, and if he washes clothes, he will earn \$45. He dislikes both tasks equally and they both take the same amount of time. Yoshi will therefore choose to _____ because it generates a _____ economic surplus.

mow the lawn; bigger

wash clothes; bigger

mow the law; smaller

wash clothes; smaller

Yoshi must choose to either mow the lawn or wash clothes. If he mows the lawn, he will earn \$25, and if he washes clothes, he will earn \$25. He dislikes both tasks equally and they both take the same amount of time. Yoshi will therefore choose _____ Blank because _____ Blank.

either activity; he dislikes them equally

neither activity; they take the same amount of time

neither activity; they generate the same economic surplus

either activity; they generate the same economic surplus

Dean should play golf instead of preparing for tomorrow's exam in economics if

he is irrational.

the benefit of golfing is greater than the benefit of studying.

the economic surplus from playing golf is greater than the economic surplus from studying.

Dean can play golf for free.

Lauren was accepted at three different graduate schools, and she must choose one. Elite U costs \$50,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$60,000 per year. State College costs \$30,000 per year and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$40,000 per year. NoName U costs \$20,000 per year and offered Lauren a full \$20,000 annual scholarship. Lauren values attending NoName at \$15,000 per year. Lauren's opportunity cost of attending Elite U is

\$70,000.

\$50,000.

\$20,000.

\$15,000.

Lauren was accepted at three different graduate schools, and she must choose one. Elite U costs \$50,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$60,000 per year. State College costs \$30,000 per year and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$40,000 per year. NoName U costs \$20,000 per year and offered Lauren a full \$20,000 annual scholarship. Lauren values attending NoName at \$15,000 per year. Lauren's opportunity cost of attending State College is

\$35,000.

\$30,000.

\$20,000.

\$15,000.

Lauren was accepted at three different graduate schools, and she must choose one. Elite U costs \$70,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$100,000 per year. State College costs \$40,000 per year and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$55,000 per year. NoName U costs \$18,500 per year and offered Lauren a full \$18,500 annual scholarship. Lauren values attending NoName at \$22,500 per year. Lauren's opportunity cost of attending State College is

\$60,000.

\$37,500.

\$30,000.

\$22,500.

Lauren was accepted at three different graduate schools, and she must choose one. Elite U costs \$50,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$60,000 per year. State College costs \$30,000 per year and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$40,000 per year. NoName U costs \$20,000 per year and offered Lauren a full \$20,000 annual scholarship. Lauren values attending NoName at \$15,000 per year. Lauren's opportunity cost of attending NoName U is

\$60,000.

\$30,000.

\$20,000.

\$15,000.

Lauren was accepted at three different graduate schools and must choose one. Elite U costs \$50,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$60,000 per year. State College costs \$30,000 per year, and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$40,000 per year. NoName U costs \$20,000 per year, and offered Lauren a full \$20,000 annual scholarship. Lauren values attending NoName at \$15,000 per year. Lauren maximizes her economic surplus by attending

Elite U.

State College.

NoName U because she has a full scholarship there.

NoName U because the annual cost is only \$20,000.

Lauren was accepted at three different graduate schools, and she must choose one. Elite U costs \$50,000 per year and did not offer Lauren any financial aid. Lauren values attending Elite U at \$60,000 per year. State College costs \$30,000 per year and offered Lauren an annual \$10,000 scholarship. Lauren values attending State College at \$40,000 per year. NoName U costs \$20,000 per year and offered Lauren a full \$20,000 annual scholarship. Lauren values attending NoName at \$15,000 per year. What is Lauren's economic surplus from attending State College instead of her next best alternative?

\$40,000

\$20,000

\$10,000

\$5,000

Jen spends her afternoon at the beach, paying \$1 to rent a beach umbrella and \$11 for food and drinks rather than spending an equal amount of money to go to a movie. Her opportunity cost of going to the beach is

the \$12 she spent on the umbrella, food, and drinks.

only \$0 because she would have spent \$12 to go to the movie.

the value she places on seeing the movie.

the value she places on seeing the movie plus the \$12 she spent on the umbrella, food, and drinks.

Jen spends her afternoon at the beach, paying \$3 to rent a beach umbrella and \$12 for food and drinks rather than spending an equal amount of money to go to a movie. Her opportunity cost of going to the beach is

\$15 if she values seeing the movie more than she values going to the beach.

exactly equal to the value she places on seeing the movie.

\$15 if she values going to the beach more than she values seeing the movie.

exactly equal to the value she places on going to the beach.

All else equal, relative to a person who earns minimum wage, a person who earns \$30 per hour has

a higher opportunity cost of working an additional hour.

a higher opportunity cost of taking the day off work.

a lower opportunity cost of driving farther to work.

the same opportunity cost of spending time on leisure activities.

The opportunity cost of an activity includes the value of

all of the alternatives that must be forgone.

the next-best alternative that must be forgone.

the least-best alternative that must be forgone.

the chosen activity minus the value of the next-best alternative.

Kendall is thinking about going to the movies tonight. A movie ticket costs \$15, and she'll have to cancel a \$20 dog-sitting job that she would have been willing to do for free. Kendall's opportunity cost of going to the movies is

\$5.

\$15.

\$20.

\$35.

Kendall is thinking about going to the movies tonight. A movie ticket costs \$18, and she'll have to cancel a \$32 dog-sitting job that she would have been willing to do for free. Kendall's opportunity cost of going to the movies is

\$43.

\$50.

\$16.

\$14.

The economic surplus of an action is

the benefit gained by taking an action.

the difference between the explicit and implicit costs of taking an action.

the difference between the benefit and the cost of taking an action.

the money a person has left over after taking an action.

You are trying to decide whether to purchase a Harry Potter book online or borrow it from the library. There is no charge for borrowing a book from the library, but going to the library takes more time than ordering a book online. Regardless of how you get the book, its benefit to you is the same. If the cost of buying the book online is \$13, then you should

borrow the book from the library because you can get it from the library for free.

borrow the book from the library if the cost of doing so (in terms of the extra time it takes) is less than \$13.

borrow the book from the library if the cost of doing so (in terms of the extra time it takes) is greater than \$13.

buy the book online because it takes less time.

Alex received a four-year scholarship to State U that covered tuition and fees, room and board, and books and supplies. If Alex becomes a full-time student, then

attending State U for four years is costless for Alex.

Alex has no incentive to study hard while at State U.

the opportunity cost of attending State U includes the money Alex could have earned working for four years.

the opportunity cost of attending State U includes the sum of the benefits Alex would have had from attending each of the other schools to which Alex was admitted.

Suppose Monique is willing to pay up to \$15,000 for a used Ford pick-up truck. If she buys one for \$12,000, her economic _____ would be _____.

benefit; \$12,000

cost; \$15,000

surplus; \$3,000

surplus; \$12,000

Suppose Monique is willing to pay up to \$12,000 for a used Ford pick-up truck. If she buys one for \$12,000, her economic _____Blank would be _____Blank.

surplus; \$12,000

surplus; \$0

cost; \$12,000

surplus; \$24,000

If individuals are rational, they should choose actions that yield the

largest total benefits.

smallest total costs.

smallest economic surplus.

largest economic surplus.

Suppose the most you would be willing to pay for a plane ticket home is \$250. If you buy one for \$175, then your economic surplus is

\$250.

\$175.

\$75.

\$0.

Suppose the most you would be willing to pay for an exercise bike is \$800. If you buy one for \$650, then your economic surplus is

an exercise bike.

\$650.

\$1,450.

\$150.

The Cost-Benefit Principle

fully captures how people choose between alternatives.

provides an abstract model of how people should choose between alternatives.

describes how people behave once they have enough education.

provides little insight into how people actually chose between alternatives.

Economists believe the Cost-Benefit Principle is

a simple but useful model of how people should make choices.

a comprehensive description of all the factors that influence people's choices.

an interesting intellectual exercise with little applicability to the real world.

of little use to those who wish to learn how to make better decisions.

The cost-benefit model used by economists is

unrealistic because it is too detailed and specific to apply to most situations.

unrealistic because everyone can think of times when he or she violated the principle.

useful because everyone follows it all of the time.

useful because most people follow it most of the time.

Economists use abstract models because

every economic situation is unique, so it is impossible to make generalizations.

every economic situation is essentially the same, so specific details are unnecessary.

they are useful for describing general patterns of behavior.

computers have allowed economists to develop abstract models.

The fact that most people make some decisions based on intuition rather than calculation is irrational, because intuition is usually wrong.

consistent with the cost-benefit model because calculating costs and benefits is irrational.

consistent with the cost-benefit model because most people intuitively weigh costs and benefits.

inconsistent with the cost-benefit model, but still rational.

Moe has a big exam tomorrow. He considered studying this evening but decided to hang out with Curly instead. If neither activity involves any explicit costs, and Moe always chooses rationally, it must be true that

the opportunity cost of studying is greater than the value Moe gets from spending time with Curly.

the opportunity cost of studying is less than the value Moe gets from spending time with Curly.

Moe gets more benefit from spending time with Curly than from studying.

Moe gets less benefit from spending time with Curly than from studying.

If one fails to account for implicit costs in decision making, then applying the cost-benefit rule will be flawed because

the benefits will be overstated.

the costs will be understated.

the benefits will be understated.

the costs will be overstated.

Your classmates from the University of Chicago are planning to go to Miami for spring break, and you are undecided about whether you should go with them. The round-trip airfare is \$600, but you have a frequent-flyer coupon worth \$500 that you could use to pay part of the airfare. All other costs for the vacation are exactly \$900. The most you would be willing to pay for the trip is \$1,400. Your only alternative use for your frequent-flyer coupon is for your trip to Atlanta two weeks after the break to attend your sister's graduation, which your parents are forcing you to attend. The Chicago-Atlanta round-trip airfare is \$450. If you do not use the frequent-flyer coupon to fly to Miami, should you go to Miami?

Yes, your benefit is more than your cost.

No, your benefit is less than your cost.

Yes, your benefit is equal to your cost.

No, because there are no benefits in the trip.

Your classmates from the University of Chicago are planning to go to Miami for spring break, and you are undecided about whether you should go with them. The round-trip airfare is \$600, but you have a frequent-flyer coupon worth \$500 that you could use to pay part of the airfare. All other costs for the vacation are exactly \$900. The most you would be willing to pay for the trip is \$1,400. Your only alternative use for your frequent-flyer coupon is for your trip to Atlanta two weeks after the break to attend your sister's graduation, which your parents are forcing you to attend. The Chicago-Atlanta round-trip airfare is \$450. What is the opportunity cost of using the coupon for the Miami trip?

\$100

\$450

\$500

\$550

Your classmates from the University of Chicago are planning to go to Miami for spring break, and you are undecided about whether you should go with them. The round-trip airfare is \$600, but you have a frequent-flyer coupon worth \$500 that you could use to pay part of the airfare. All other costs for the vacation are exactly \$900. The most you would be willing to pay for the trip is \$1,400. Your only alternative use for your frequent-flyer coupon is for your trip to Atlanta two weeks after the break to attend your sister's graduation, which your parents are forcing you to attend. The Chicago-Atlanta round-trip airfare is \$450. Should you use the frequent flyer coupon to go to Miami?

Yes, your benefit is more than your cost.

No, your benefit is less than your cost.

Yes, your benefit is equal to your cost.

No, because there are no benefits in the trip.

Your classmates from the University of Chicago are planning to go to Miami for spring break, and you are undecided about whether you should go with them. The round-trip airfare is \$600, but you have a frequent-flyer coupon worth \$500 that you could use to pay part of the airfare. All other costs for the vacation are exactly \$900. The most you would be willing to pay for the trip is \$1,400. Your only alternative use for your frequent-flyer coupon is for your trip to Atlanta two weeks after the break to attend your sister's graduation, which your parents are forcing you to attend. The Chicago-Atlanta round-trip airfare is \$450. If the Chicago-Atlanta round-trip air fare were \$350, should you use the coupon to go to Miami?

No, your economic surplus would be $-\$50$.

No, your economic surplus would be $-\$100$.

Yes, your economic surplus would be \$50.

Yes, your economic surplus would be \$400.

Sam earns \$25,000 per year (after taxes), and Sam's spouse, Ryan, earns \$35,000 (after taxes). They have two pre-school-aged children. Childcare for their children costs \$12,000 per year. Given that Ryan doesn't want to stay home with the kids, regardless of what Sam does, Sam should stay home with the kids if, and only if, the value of Sam spending more time with the kids is greater than

\$37,000 per year.

\$25,000 per year.

\$13,000 per year.

\$12,000 per year.

You paid \$35 for a ticket (which is nonrefundable) to see SPAM, a local rock band, in concert on Saturday. Assume that \$35 is the most you would have been willing to pay for a ticket. Your boss called, and she is looking for someone to cover a shift on Saturday at the same time as the concert. You would have to work 4 hours and she would pay you \$11/hr. The cost to you of working is \$2/hr. Should you go to the concert instead of working Saturday?

Yes, the benefit of going to the concert is more than the cost.

No, the benefit of going to the concert is less than the cost.

Yes, the benefit of going to the concert is equal to the cost.

No, because there are no benefits of going to the concert.

You paid \$35 for a ticket (which is nonrefundable) to see SPAM, a local rock band, in concert on Saturday. Assume that \$35 is the most you would have been willing to pay for a ticket. Your boss called, and she is looking for someone to cover a shift on Saturday at the same time as the concert. You would have to work 4 hours and she would pay you \$11/hr. The cost to you of working is \$2/hr. What is the opportunity cost of going to the concert?

\$1

\$9

\$35

\$36

You paid \$35 for a ticket (which is nonrefundable) to see SPAM, a local rock band, in concert on Saturday. Assume that \$35 is the most you would have been willing to pay for a ticket. Your boss called, and she is looking for someone to cover a shift on Saturday at the same time as the concert. You would have to work 4 hours and she would pay you \$11/hr. The cost to you of working is \$2/hr. What is your opportunity cost of going to work on Saturday?

\$0

\$9

\$35

\$36

You paid \$35 for a ticket (which is nonrefundable) to see SPAM, a local rock band, in concert on Saturday. Assume that \$35 is the most you would have been willing to pay for a ticket. Your boss called, and she is looking for someone to cover a shift on Saturday at the same time as the concert. You would have to work 4 hours and she would pay you \$11/hr. The cost to you of working is \$2/hr. Your economic surplus from going to work instead of seeing SPAM on Saturday is

\$0.

\$1.

\$35.

\$36.

Matt has decided to purchase his textbooks for the semester. His options are to purchase the books online with next-day delivery at a cost of \$175, or to drive to campus tomorrow to buy the books at the university bookstore at a cost of \$170. Last week he drove to campus to buy a concert ticket because they offered 25 percent off the regular price of \$16. The benefit to Matt of buying his books at the university bookstore instead of online is

\$5.

\$9.

\$170.

\$175.

Matt has decided to purchase his textbooks for the semester. His options are to purchase the books online with next-day delivery at a cost of \$175, or to drive to campus tomorrow to buy the books at the university bookstore at a cost of \$170. Last week he drove to campus to buy a concert ticket because they offered 25 percent off the regular price of \$16. The benefit to Matt of driving to campus to buy the concert ticket last week was

\$2.

\$4.

\$9.

\$16.

Matt has decided to purchase his textbooks for the semester. His options are to purchase the books online with next-day delivery at a cost of \$175, or to drive to campus tomorrow to buy the books at the university bookstore at a cost of \$170. Last week he drove to campus to buy a concert ticket because they offered 25 percent off the regular price of \$16. Given that driving to campus to buy the concert ticket was rational for Matt, Matt should

not drive to campus to buy the books because the \$5 he would save is only two percent of the cost of the books, and that is much less than the 25 percent he saved on the concert ticket.

drive to campus to buy the books because the books are cheaper at the bookstore than online.

drive to campus to buy the books because the \$5 he would save is more than he saved by driving to campus to buy the concert ticket.

not drive to campus to buy the books because the cost of gas and his time must certainly be more than the \$5 he would save.

Matt has decided to purchase his textbooks for the semester. His options are to purchase the books online with next-day delivery at a cost of \$175, or to drive to campus tomorrow to buy the books at the university bookstore at a cost of \$170. Last week he drove to campus to buy a concert ticket because they offered 25 percent off the regular price of \$16. Assume the minimum that Matt would be willing to accept to drive to campus is equal to the \$4 he saved on the concert ticket. What would his economic surplus be if he bought his textbooks at the university bookstore rather than online?

\$5

\$1

\$50

\$20

The marginal benefit of an activity is the same as the total benefit of an activity.

total benefit of an activity divided by the level of the activity.

extra benefit associated with an extra unit of the activity.

total benefit associated with an extra unit of the activity.

Suppose the total benefit of watching 1 baseball game is 100, the total benefit of watching 2 games is 120, and the total benefit of watching 3 games is 125. In this case, the marginal benefit of watching the 3rd game is

125.

5.

41.67.

375.

Suppose the total benefit of watching 1 baseball game is 100, the total benefit of watching 2 games is 150, and the total benefit of watching 3 games is 160. In this case, the marginal benefit of watching the 2nd game is

10.

150.

75.

50.

The extra benefit that results from carrying out one additional unit of an activity is the _____ of the activity.

marginal benefit

total benefit

average benefit

economic benefit

The marginal cost of an activity is the

change in the total cost of the activity that results from carrying out an additional unit of the activity.

total cost of the activity divided by the change in the level of the activity.

total cost of the activity divided by the level of the activity.

change in the level of the activity divided by the change in the cost of the activity.

The extra cost that results from carrying out one additional unit of an activity is the _____ of the activity.

marginal benefit

marginal cost

reservation cost

opportunity cost

Dividing the total cost of undertaking n units of an activity by n reveals the average benefit.

marginal cost.

units per cost.

average cost.

For the fall semester, you had to pay a nonrefundable fee of \$600 for your meal plan, which gives you up to 150 meals. If you eat all of the meals, your average cost per meal is

\$6.00.

\$5.00.

\$4.00.

\$0.25.

For the fall semester, you had to pay a nonrefundable fee of \$750 for your meal plan, which gives you up to 150 meals. If you eat 150 meals, your average cost per meal is

\$0.50.

\$5.00.

\$2.00.

\$0.20.

For the fall semester, you had to pay a nonrefundable fee of \$600 for your meal plan, which gives you up to 150 meals. If you only eat 1 meal, your average cost for a meal is

\$600.

\$150.

\$4.

\$596.

For the fall semester, you had to pay a nonrefundable fee of \$600 for your meal plan, which gives you up to 150 meals. If you eat 100 meals, your marginal cost of the 100th meal is

\$6.00.

\$4.00.

\$0.25.

\$0.

The average benefit of n units of an activity is the
total benefit of n units divided by n .

n divided by the total benefit of

n units.

n times the total benefit of

n units.

extra benefit from carrying out one additional unit of the activity.

You save \$10 on gas every week because you take the bus to school. You have class 5 days a week. What is your average benefit per day of taking the bus to school?

\$10

\$5

\$2

\$0

Your scholarship depends on your maintaining a 3.5 cumulative GPA. Your GPA for last semester was 3.6, which brought your cumulative GPA down. What must be true?

Last semester's grades were higher than your overall GPA.

Last semester's grades were lower than your overall GPA.

If this semester's grades are the same as last semester's, your overall GPA will stay the same.

If this semester's grades are the same as last semester's, you might lose your scholarship.

Refer to the accompanying table. The average cost of 4 units of this activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$20.

\$25.

\$30.

\$40.

Refer to the accompanying table. The average cost of 4 units of this activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$40.

\$20.

\$30.

\$25.

Refer to the accompanying table. The marginal cost of the 3rd unit of this activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$30.

\$25.

\$20.

\$10.

Refer to the accompanying table. The marginal benefit of the 4th unit of this activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$20.

\$0.

\$10.

\$15.

Refer to the accompanying table. The average benefit of 2 units of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$80.

\$60.

\$40.

\$20.

Refer to the accompanying table. The marginal benefit of the 5th unit of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

\$50.

\$44.

\$10.

\$5.

Refer to the accompanying table. According to the Cost-Benefit Principle, how many units of this activity should be carried out?

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	100
2	40	160
3	60	190
4	100	210
5	150	220
6	210	225

1 unit

3 units

4 units

6 units

Refer to the accompanying table. According to the Cost-Benefit Principle, how many units of this activity should be carried out?

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	30	50
2	40	80
3	60	95
4	100	105
5	150	110
6	210	112

1 unit

3 units

5 units

2 units

Refer to the accompanying table. The average cost of 5 units of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	2	12
2	6	22
3	12	30
4	20	36
5	30	40
6	42	42
7	56	43

\$4.

\$6.

\$8.

\$10.

Refer to the accompanying table. The marginal cost of the 4th unit of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	2	12
2	6	22
3	12	30
4	20	36
5	30	40
6	42	42
7	56	43

\$5.

\$6.

\$8.

\$10.

Refer to the accompanying table. The average benefit of 4 units of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	2	12
2	6	22
3	12	30
4	20	36
5	30	40
6	42	42
7	56	43

\$4.

\$5.

\$9.

\$10.

Refer to the accompanying table. The marginal benefit of the 6th unit of activity is

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	2	12
2	6	22
3	12	30
4	20	36
5	30	40
6	42	42
7	56	43

\$1.

\$2.

\$4.

\$7.

Refer to the accompanying table. According to the Cost-Benefit Principle, how many units of this activity should be carried out?

Units of Activity	Total Cost	Total Benefit
0	\$ 0	\$ 0
1	2	12
2	6	22
3	12	30
4	20	36
5	30	40
6	42	42
7	56	43

2

3

4

5

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The total value of donations raised by three employees is \$43,899.

\$45,000.

\$48,911.

\$51,963.

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The total labor cost with 4 employees is

\$21,500.

\$22,000.

\$38,000.

\$43,121.

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The president of State U decides to hire fundraising employees as long as their average benefit exceeds their average cost. This results in _____ employees being hired and a net benefit (total donations minus total labor costs) of _____.

5; \$17,080

5; \$67,080

4; \$60,000

4; \$22,000

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The marginal benefit (in terms of extra donations) of the 2nd employee is \$42,426.

\$21,213.

\$12,426.

\$11,337.

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The marginal cost of the 4th employee is
\$9,500.

\$10,750.

\$11,000.

\$13,000.

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The Chair of the Economics Department at State U says that fundraising employees should be hired as long as their marginal benefit exceeds their marginal cost. If the University follows this advice, then _____ employee(s) will hired, and the net benefit (total donations minus total labor costs) will be _____.

1; \$22,000

2; \$25,426

3; \$25,426

2; \$3,476

The accompanying table shows how total donations, average donations, total labor costs, and average labor costs vary depending on the number of employees State U hires for its fundraising activities:

Number of Employees	Total Donations	Average Donations	Total Labor Costs	Average Labor Costs
1	\$ 30,000			\$ 8,000
2	42,426		\$ 17,000	
3		\$ 17,321	27,000	
4	60,000			9,500
5		13,416	50,000	

The net benefit of hiring fundraisers is largest when _____ employees are hired.

4

3

2

1

Ginger bought a phone that came with a \$10 rebate. Ginger should fill out and mail in the rebate form if

the opportunity cost of the time and trouble of sending in the rebate form is less than \$10.

the opportunity cost of the time and trouble of sending in the rebate form is more than \$10.

she would have bought the phone without the rebate, and so sending in the rebate form involves no opportunity cost.

Ginger's surplus from purchasing the phone was less than \$10.

Tony notes that an electronics store is offering a flat \$20 off all prices in the store. Tony reasons that if he wants to buy something with a price of \$50, then it is a good offer, but if he wants to buy something with a price of \$500, then it is not a good offer. This is an example of

inconsistent reasoning; saving \$20 is saving \$20.

the proper application of the Cost-Benefit Principle.

rational choice because saving 40 percent is better than saving 4 percent.

inconsistent reasoning because prices are sunk costs.

Suppose a retail store was offering 10 percent off list prices on all goods. The benefit of the 10 percent savings is

unrelated to the list price of the good.

negatively related to the list price of the good.

positively related to the list price of the good.

zero since costs and benefits shouldn't be measured proportionally.

A firm pays Alexa \$40 per hour to assemble personal computers. Each day, Alexa can assemble 4 computers if she works 1 hour, 7 computers if she works 2 hours, 9 computers if she works 3 hours, and 10 computers if she works 4 hours. Alexa cannot work more than 4 hours day. Each computer consists of a motherboard, a hard drive, a case, a monitor, a keyboard, and a mouse.

The total cost of these parts is \$600 per computer. What is the marginal cost of producing the computers that Alexa can assemble during her 3rd hour of work?

\$5,400

\$5,520

\$1,200

\$1,240

A firm pays Alexa \$40 per hour to assemble personal computers. Each day, Alexa can assemble 4 computers if she works 1 hour, 7 computers if she works 2 hours, 9 computers if she works 3 hours, and 10 computers if she works 4 hours. Alexa cannot work more than 4 hours day. Each computer consists of a motherboard, a hard drive, a case, a monitor, a keyboard, and a mouse. The total cost of these parts is \$600 per computer. What is the marginal cost of producing the computers that Alexa can assemble during her 2nd hour of work?

\$1,800

\$1,840

\$4,200

\$4,280

A firm pays Alexa \$40 per hour to assemble personal computers. Each day, Alexa can assemble 4 computers if she works 1 hour, 7 computers if she works 2 hours, 9 computers if she works 3 hours, and 10 computers if she works 4 hours. Alexa cannot work more than 4 hours day. Each computer consists of a motherboard, a hard drive, a case, a monitor, a keyboard, and a mouse. The total cost of these parts is \$600 per computer. If the firm sells each computer for \$625, then how many hours a day should the firm employ Alexa to maximize its net benefit from her employment?

1 hour

2 hours

3 hours

4 hours

A firm pays Alexa \$40 per hour to assemble personal computers. Each day, Alexa can assemble 4 computers if she works 1 hour, 7 computers if she works 2 hours, 9 computers if she works 3 hours, and 10 computers if she works 4 hours. Alexa cannot work more than 4 hours a day. Each computer consists of a motherboard, a hard drive, a case, a monitor, a keyboard, and a mouse. The total cost of these parts is \$600 per computer. If the firm sells each computer for \$650, then how many hours a day should the firm employ Alexa to maximize its net benefit from her employment?

- 1 hour
- 2 hours
- 3 hours
- 4 hours

If Sasha works for 6 hours she can rent out 9 apartments, and if she works for 7 hours she can rent out 12 apartments. The marginal benefit of Sasha's 7th hour of work equals

- 12 apartments.
- 9 apartments.
- 3 apartments.
- 1 apartment.

If Sasha works for 7 hours she can rent out 6 apartments, and if she works for 8 hours she can rent out 9 apartments. The average benefit from 7 hours of work equals

- 1.17 apartments.
- 1.14 apartments.
- 0.86 of an apartment.
- 1.13 apartments.

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase.

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

The marginal benefit of upgrading from a 2.0GHz computer to a 2.5GHz computer is \$1,400.

\$1,000.

\$400.

\$100.

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase.

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

The total benefit of a 3.0GHz computer is \$300.

\$900.

\$1,700.

\$1,650.

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase.

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

- The total cost of a 2.5GHz computer is
- \$1,000.
 - \$900.
 - \$200.
 - \$100.

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase. The marginal cost of upgrading from a 2.5GHz to 3.0GHz computer is

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

- \$400.

\$300.

\$200.

\$100.

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase. Application of the Cost-Benefit Principle would lead one to purchase a

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

_____ computer.

2.0GHz

2.5GHz

3.0GHz

4.0GHz

The accompanying table shows the relationship between the speed of a computer's CPU and its benefits and costs. Assume that all other features of the computer are the same (that is, CPU speed is the only source of variation), and only the CPU speeds listed in the table are available for purchase. Choosing a 3.5GHz computer would be irrational because

CPU GHz	Total Benefit	Marginal Benefit	Total Cost	Marginal Costs
2.0	\$ 1,000		\$ 900	
2.5	\$ 1,400			\$ 100
3.0		\$ 300	\$ 1,200	
3.5	\$ 1,900		\$ 1,500	
4.0	\$ 2,000			\$ 400

its marginal benefit is less than its marginal cost.

its marginal benefit is equal to its marginal cost.

it is impossible to tell the difference compared to a 3.0GHz computer.

its marginal benefit is greater than its marginal cost.

Jack has a ticket to see Post Malone for which he paid \$30 yesterday. He takes an unpaid day off from work to get ready for the concert. When he arrives at the concert, five different people offer him \$70 for his ticket. Jack decides to keep his ticket. At the time he makes this decision, his opportunity cost of seeing Post Malone is

\$30 plus his forgone earnings.

\$40.

\$70.

\$70 plus his forgone earnings.

Jody has purchased a nonrefundable \$75 ticket to attend a Miley Cyrus concert on Friday night. Subsequently, she is asked to go to out dinner at no expense to her. If she uses cost-benefit analysis to choose between going to the concert and going out to dinner, the opportunity cost of going out to dinner should include

only the entertainment value of the concert.

the cost of the ticket plus the entertainment value of the concert.

only the cost of concert ticket.

neither the cost of the ticket nor the entertainment value of the concert.

You won a free ticket to see the latest superhero movie this Friday night (which you can costlessly resell for its face value of \$15). Your favorite band is also performing on Friday and is your only alternative activity. Friday is your last chance to see either the movie or the band. Tickets to see your favorite band cost \$30, and on any given day, you would be willing to pay as much as \$50 for a ticket. Based on this information, what is your opportunity cost of going to see the movie on Friday?

\$0

\$30

\$35

\$50

You want to buy a TV that regularly costs \$250. You can either buy the TV from a nearby store or from a store that's downtown. Relative to going to the nearby store, driving downtown involves additional time and gas. The downtown store, however, has a 10 percent off sale this week. Last week you drove downtown to save \$20 on some concert tickets, a 15 percent savings. Should you drive downtown to buy the TV?

Yes, because you will save 10 percent, which is better than nothing.

No, because you will save more than \$20.

Yes, because you will save more than \$20.

No, because you will only save 10 percent, which is less than 15 percent.

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$15. What's the average benefit of 4 car washes per month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	20
2	36
3	48
4	56
5	60

\$14

\$12

\$8

\$4

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$5. What's the average benefit of 3 car washes per month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	18
2	35
3	51
4	66
5	78

\$17.00

\$16.50

\$15.00

\$16.00

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$15. What is the marginal cost of the 5th car wash each month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	20
2	36
3	48
4	56
5	60

\$15

\$14

\$12

\$4

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$19. What is the marginal cost of the second car wash each month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	14
2	27
3	35
4	39
5	42

\$19.00

\$13.50

\$27.00

\$13.00

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$15. What is the marginal benefit of the 3rd car wash each month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	20
2	36
3	48
4	56
5	60

\$4

\$12

\$16

\$48

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$9. What is the marginal benefit of the first car wash each month?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	24
2	47
3	69
4	90
5	108

\$12

\$0

\$24

\$23

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$15. How many times a month should you get your car washed?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	20
2	36
3	48
4	56
5	60

1

2

3

4

The accompanying table shows the relationship between the number of times you get your car washed each month and your total monthly benefit from car washes. Each car wash costs \$5. How many times a month should you get your car washed?

Number of Car Washes Per Month	Total Monthly Benefit from Car Washes
0	\$ 0
1	18
2	35
3	51
4	66
5	78

4

5

2

3

Ushi owns an apple farm and plans to spend 4 hours today picking apples. The number of apples he can pick per hour depends on the total number of hours he spends working in either the east orchard or the west orchard in the manner shown in the accompanying table: If Ushi spends 2

hours picking apples in the east orchard and 2 hours picking apples in the west orchard, how many apples in total will Ushi be able to pick today?

Hours in East Orchard	Number of Apples Per Hour	Hours in West Orchard	Number of Apples Per Hour
1	40	1	10
2	32	2	10
3	25	3	10
4	20	4	10

21

42

84

92

Ushi owns an apple farm and plans to spend 4 hours today picking apples. The number of apples he can pick per hour depends on the total number of hours he spends working in either the east orchard or the west orchard in the manner shown in the accompanying table: What is the opportunity cost to Ushi of spending an additional hour picking apples in the East orchard?

Hours in East Orchard	Number of Apples Per Hour	Hours in West Orchard	Number of Apples Per Hour
1	40	1	10
2	32	2	10
3	25	3	10
4	20	4	10

10 apples

20 apples

30 apples

40 apples

Ushi owns an apple farm and plans to spend 4 hours today picking apples. The number of apples he can pick per hour depends on the total number of hours he spends working in either the east orchard or the west orchard in the manner shown in the accompanying table below. What is the marginal benefit to Ushi of the 2nd hour he spends picking in the east orchard?

Hours in East Orchard	Number of Apples Per Hour	Hours in West Orchard	Number of Apples Per Hour
1	40	1	10
2	32	2	10
3	25	3	10
4	20	4	10

8 apples

24 apples

32 apples

64 apples

Ushi owns an apple farm and plans to spend 4 hours today picking apples. The number of apples he can pick per hour depends on the total number of hours he spends working in either the east orchard or the west orchard in the manner shown in the accompanying table: How should Ushi divide his time between the east and the west orchard?

Hours in East Orchard	Number of Apples Per Hour	Hours in West Orchard	Number of Apples Per Hour
1	40	1	10
2	32	2	10
3	25	3	10
4	20	4	10

He should spend all 4 hours in the east orchard.

He should spend 3 hours in the east orchard and 1 hour in the west orchard.

He should spend 2 hours in east orchard and 2 hours in the west orchard.

He should spend 1 hour in the east orchard and 3 hours in the west orchard.

Positive economic principles are those that

are always correct.

are influenced by political ideology.

indicate how people should behave.

predict how people will behave.

One thing that distinguishes normative economic principles from positive economic principles is that

normative principles are pessimistic and positive principles are optimistic.

normative principles reflect social norms, and positive principles reflect universal truths.

normative principles tell us how people should behave, and positive principles tell us how people will behave.

normative principles tell us how people will behave, and positive principles tell us how people should behave.

Normative economic principles are concerned with how people _____ make decisions while positive economic principles are concerned with how people _____ make decisions.

do; should

should; do

in power; in ordinary life

in ordinary life; in power

An editorial in the paper argues that a person only should be allowed to attend school if the marginal cost of educating that person is less than the marginal benefit of educating that person. The writer's reasoning is an application of

positive economics.

negative economics.

normative economics.

economic naturalism.

The Incentive Principle states that a person

is more likely to take an action if its cost increases.

is more likely to take an action if its benefit increases.

should take an action if its cost increases.

should take an action if its benefit increases.

The Incentive Principle is an example of

an economic decision-making pitfall.

overestimating the benefits of an action.

a positive economic principle.

a normative economic principle.

According to the Incentive Principle, people will be less likely to smoke if the government

increases taxes on smoking-cessation devices such as nicotine patches.

increases taxes on cigarettes, effectively raising the price.

subsidizes hospitals treating lung disease.

invests more money in cancer research.

According to the Incentive Principle

it is irrational to perform volunteer services.

people will always take the highest-paying job they are offered.

benefits are more important than costs in making a decision.

people tend to do more of something when its benefits are greater.

Microeconomics differs from macroeconomics in that microeconomics focuses on

the performance of the entire economy.

issues such as inflation, unemployment, and economic growth.

the choices made by individuals and the implications of those choices.

government policies designed improve the performance of the national economy.

Macroeconomics differs from microeconomics in that macroeconomics focuses on

individual choices and group behavior in individual markets.

the performance of national economies and ways to improve that performance.

production in specific markets.

prices in specific markets.

The study of individual choice and its implications for the behavior of prices and quantities in individual markets is

microeconomics.

a normative economic principle.

the Scarcity Principle.

macroeconomics.

Which branch of economics is most likely to study differences in countries' growth rates?

microeconomics

normative economics

macroeconomics

experimental economics

Which of the following would *not* be studied in microeconomics?

how individual firms decide how much to produce

whether to study or watch TV tonight

how an early freeze in California will affect the price of fruit

whether the federal budget should be balanced

Which of the following would *not* be studied in macroeconomics?

the causes of the Great Depression

the growth rate of the U.S. economy

how a sharp increase in gasoline prices is likely to affect SUV sales
the impact of government spending on the economy

By convention, there are two major divisions of economics, called
marginal benefit and marginal cost.

reservation price and opportunity cost.

microeconomics and macroeconomics.

rational economics and irrational economics.

A study that deals with the salaries of university professors would be considered
macroeconomics.

microeconomics.

economic naturalism.

real economics.

A study that deals with the impact of government debt on economic growth would be considered
government economics.

macroeconomics.

rational economics.

microeconomics.

In deciding how many guitars to buy for his shop before the Christmas season, Miguel is making
a(n)_____ decision.

microeconomic

macroeconomic

normative

irrational

A study of the impact of various government policies on economic growth would be considered
microeconomics.

macroeconomics.

government economics.

marginal economics.

The field of economics that would be most concerned with a recent fall in interest rates is

microeconomics.

macroeconomics.

economic naturalism.

marginal economics.

An economic naturalist is someone who

uses economic arguments to protect the environment.

has an innate talent for using economic concepts.

applies economic insights to understand everyday life.

studies the process of natural selection in a cost-benefit framework.

With ATMs, it is possible to retrieve cash from the bank at any time. One hundred years ago, one could only get cash from the bank during business hours, say, 9 a.m. to 3 p.m. The present availability of 24-hour service has arisen because

flexibility was not valued 100 years ago.

it was impossible to provide 24-hour service 100 years ago.

the cost of providing 24-hour service is much lower today.

government forced banks to become more convenient.

The number of U.S. households with access to the Internet has grown rapidly. Compared to 50 years ago, one would predict that when considering a major purchase, people today will gather less information because the Internet has lowered the cost of gathering information.

less information because the Internet has increased the benefit of gathering information.

more information because the Internet has lowered the cost of gathering information.

more information because the Internet has increased the cost of gathering information.

Every time you go to the grocery store, you try to wait in the shortest line. But the lines always seem to be roughly the same length. Why?

Random chance equalizes the length of the lines.

Other people are trying to choose the shortest line too.

The cashiers work at the same speed.

The cashiers do not have an incentive to work faster.

Suppose there are two parallel highways between two cities with approximately equal traffic. What would you expect to happen if the state began charging tolls to drive on one of those highways?

More drivers would drive on the non-toll road, making the toll road less congested.

More drivers would drive on the toll road making the non-toll road less congested.

Traffic would remain evenly divided between the two roads as drivers continuously sought the less-congested route.

Traffic would decrease on both roads.

During times of high unemployment, colleges often observe an increase in enrollment even if tuition remains unchanged. Why?

Students go to college even when the net benefit is negative.

The opportunity cost of attending college is lower when unemployment is high.

The opportunity cost of attending college is higher when unemployment is high.

The benefit of attending college is lower because college graduates are less likely to find jobs.

The last time gas prices increased drastically, sales of large sport utility vehicles (SUVs) fell. Why?

Higher gas prices lowered the benefit of driving an SUV.

Higher gas prices increased the benefit of driving an SUV.

Higher gas prices increased the cost of driving a SUV.

Higher gas prices lowered the cost of driving a SUV.

Due to the fact that Curly used his frequent flyer miles to fly to visit Moe, Curly told Moe that it didn't cost him anything to visit. Is Curly correct?

Yes, because Curly's frequent flyer miles made the trip free.

Yes, because Curly could stay at Moe's house for free.

No, because Curly could have used his frequent flyer miles to go somewhere else instead.

No, because Curly had to pay for earlier trips in order to earn the frequent flyer miles.

Enrique can either drive to work, which takes half an hour and uses \$1.50 worth of gas, or take the bus, which takes an hour and costs \$1. How should Enrique get to work?

Enrique should take the bus because it costs \$0.50 less than driving.

Enrique should drive because it saves half an hour relative to taking the bus.

Enrique should drive if saving half an hour is worth \$0.50 or more.

Enrique should take the bus if saving half an hour is worth \$0.50 or more.

You have two options for how to spend the afternoon. You can either go see a movie with your roommate or work as a tutor for the Math Department. From experience, you know that going to see a movie gives you \$20 worth of enjoyment, and with your student discount, a movie ticket only costs \$12. If you spend the afternoon working as a math tutor, you will get paid \$45. On a typical day, you wouldn't be willing to spend the afternoon working as a math tutor for less than \$35. What is your opportunity cost of seeing a movie this afternoon?

\$8

\$12

\$22

\$57

You have two options for how to spend the afternoon. You can either go see a movie with your roommate or work as a tutor for the Math Department. From experience, you know that going to see a movie gives you \$20 worth of enjoyment, and with your student discount, a movie ticket only costs \$12. If you spend the afternoon working as a math tutor, you will get paid \$45. On a typical day, you wouldn't be willing to spend the afternoon working as a math tutor for less than \$35. What is your economic surplus from working as a math tutor instead of going to the movies?

\$8

\$2

\$12

\$10

You have two options for how to spend the afternoon. You can either go see a movie with your roommate or work as a tutor for the Math Department. From experience, you know that going to see a movie gives you \$20 worth of enjoyment, and with your student discount, a movie ticket only costs \$12. If you spend the afternoon working as a math tutor, you will get paid \$45. On a typical day, you wouldn't be willing to spend the afternoon working as a math tutor for less than \$35. Should you go see a movie or work as a math tutor?

You should work as a math tutor.

You should go to the movies.

You should do neither.

Both options are equally good.

Externalities are

the side effects that can accompany exchange.

the private gain that businesses pursue.

evidence of the invisible hand at work.

the reason that world income per capita has fallen during the last 1,000 years.

Adam Smith's modern disciples tend to

be less cautious than Smith was in their support for private markets and the invisible hand.

reject Smith's assessment of the practical value of the invisible hand while accepting it on theoretical grounds.

be more circumspect than Smith was about the consequences of self-serving behavior.

soften Smith's firm rejection of private markets and self-serving behavior.

According to the textbook, Adam Smith and Milton Friedman are most likely to disagree about which of the following?

the use of demand and supply to analyze private markets

whether the U.S. government should be in charge of the Sahara Desert

the degree to which regulation of private markets threatens human welfare

whether income per capita has risen over the last two millennia

Some economists may oppose government regulation, even for markets in which pursuit of self-interest leads to obviously undesirable results, because they

don't believe that government can figure out the appropriate way to regulate markets.

oppose taxes in every form, and all government regulations are taxes.

benefit personally from the undesirable outcomes caused by pursuit of self-interest.

believe that the government may create an outcome that is even worse.

Suppose Tomás, a private citizen, gets \$1,000 worth of value each year from how cool he feels driving around in a three-ton SUV; Jorge, a business owner, gets \$20,000 worth of value each year from being able to use a three-ton truck for his business. Suppose that no matter who drives it, the environmental damage caused by a three-ton vehicle costs \$1,500 to clean up. Which of the following government regulations is best in this instance?

a \$1,500 annual tax on three-ton vehicles

a \$1,500 one-time tax on three-ton vehicles

a ban on three-ton vehicles

a \$750 annual tax on three-ton vehicles

Adam Smith believed that, due to the work of the invisible hand, pursuit of self-interest in private markets_____ promotes the best interests of society at large.

frequently

always

seldom

never

Adam Smith believed that the pursuit of self-interest in private markets_____ promotes the interests of society, while his modern disciples believe that it_____ does.

frequently; never

seldom; always

frequently; always

seldom; never

Answer Key

Test name: Ch1_Principles of Economics_2025

C

Economics is the study of how people make choices under conditions of scarcity and the implications of those choices for society as a whole.

C

Economics is the study of how people make choices under conditions of scarcity and the implications of those choices for society as a whole.

B

Economists recognize that the resources available to us are limited, so having more of one good thing means having less of another.

C

The Scarcity Principle states that although we have boundless needs and wants, the resources available to us are limited. So having more of one thing means having less of another.

D

The Scarcity Principle states that although we have boundless needs and wants, the resources available to us are limited. So having more of one thing means having less of another.

A

Economists assume that resources will always be scarce relative to people's wants.

D

Everyone has boundless wants and limited resources.

C

Even if Forest is self-sufficient, he still has limited resources and unlimited wants. For example, he might want to have more than 24 hours in a day. Thus, he still has to make trade-offs.

A

Economists assume that resources will always be scarce relative to people's wants.

D

Chris has to make a trade-off: if Chris goes to the gym, Chris cannot also study and vice versa.

C

Jackie has to make a trade-off: time is a scarce resource and so she must choose between the two activities.

B

The Scarcity Principle states that although we have boundless needs and wants, the resources available to us are limited. So having more of one thing means having less of another.

D

The extra benefits and extra costs from taking an action determine whether that action should be taken.

C

The Cost-Benefit Principle states that an individual should take an action if, and only if, the extra benefits from taking that action are at least as great as the extra costs.

B

Considering the extra benefits and extra costs of an action is an example of using the Cost-Benefit Principle.

A

The Scarcity Principle tells us that people must make choices because resources are scarce and wants are unlimited. The Cost-Benefit Principle tells us that we should make choices by weighing the extra benefits of an action against its extra costs.

A

The Cost-Benefit Principle tells us that we should make choices by weighing the extra benefits of an action against its extra costs.

B

Rational people make decisions according to the Cost-Benefit Principle.

B

According to the Cost-Benefit Principle, an individual should take an action if, and only if, the extra benefits of taking the action are at least as great as the extra costs. In this case, since the extra cost of a third glass of soda is zero, Ava should drink a third glass as long as the extra benefit of doing so is positive.

B

Because both activities have the same cost (Yoshi's time and his dislike of the task), the activity with the greatest benefit will yield the greatest economic surplus.

D

Because both activities have the same cost (Yoshi's time and his dislike of the task), the activity with the greatest benefit will yield the greatest economic surplus.

C

People should choose actions that generate the largest possible economic surplus.

A

If Lauren attends Elite U, she not only has to pay \$50,000 in out-of-pocket expenses, but she also has to give up the value of her next-best option. To determine the value of her next best option, note that the value to Lauren from attending State College (net of tuition) is $\$40,000 - \$20,000 = \$20,000$. And her value from attending NoName U (net of tuition) is $\$15,000 - 0 = \$15,000$. So going to State College is her next best option, and her opportunity cost of going to Elite U is $\$50,000 + \$20,000 = \$70,000$.

A

If Lauren attends State College, she not only has to pay \$20,000 ($= \$30,000 - \$10,000$) in out-of-pocket expenses, but she also has to give up the value of her next-best option. To determine the value of her next best option, note that the value to Lauren from attending Elite U (net of tuition) is $\$60,000 - \$50,000 = \$10,000$. And, her value from attending NoName U (net of tuition) is $\$15,000 - 0 = \$15,000$. So going to NoName U is her next-best option, and her opportunity cost of going to State College is $\$20,000 + \$15,000 = \$35,000$.

A

If Lauren attends State College, she not only has to pay out-of-pocket expenses, but she also has to give up the value of her next-best option. So her opportunity cost of going to State College is \$60,000.

C

If Lauren attends NoName U, she will not have any out-of-pocket expenses, but she will still have to give up the value of her next-best option. To determine the value of her next best option, note that the value to Lauren from attending Elite U (net of tuition) is $\$60,000 - \$50,000 = \$10,000$. And, her value from attending State College (net of tuition) is $\$40,000 - \$20,000 = \$20,000$. Thus, going to State College is her next-best option, and her opportunity cost of attending NoName U is \$20,000.

B

To determine what Lauren should do, determine the value of each option *as if it were her only choice*. In this case, the value to Lauren from attending Elite U (net of tuition) is $\$60,000 - \$50,000 = \$10,000$. Her value from attending State College (net of tuition) is $\$40,000 - \$20,000 = \$20,000$. And, her value from attending NoName U (net of tuition) is $\$15,000 - 0 = \$15,000$. Thus, her economic surplus will be the highest if she attends State College.

D

The benefit to Lauren of attending State College is \$40,000. Her cost of attending State College includes both \$20,000 ($= \$30,000 - \$10,000$) in out-of-pocket expenses and the value of her next best alternative. To determine the value of this next best alternative, note that the value to Lauren from attending Elite U (net of tuition) is $\$60,000 - \$50,000 = \$10,000$. And, her value from attending NoName U (net of tuition) is $\$15,000 - 0 = \$15,000$. Thus, her next best alternative is NoName U, and Lauren's economic surplus from attending State College instead of NoName U is $\$40,000 - \$20,000 - \$15,000 = \$5,000$.

C

Opportunity cost is the value that must be forgone to undertake an activity. By going to the beach, Jen gives up the value she places on seeing the movie. We don't include the \$12 she spends at the beach because she also would have spent that money at the movies.

B

Opportunity cost is the value that must be forgone to undertake an activity. By going to the beach, Jen gives up the value she places on seeing the movie. We don't include the money she spends at the beach because she also would have spent that money at the movies.

B

All else equal, giving up a day of work "costs" the person who can earn \$30 per hour more than it does someone who earns the minimum wage.

B

The opportunity cost of an activity is not the total value of all possible activities that you could have pursued, but only the value of the one alternative you give up, which is presumably the next-best one.

D

Opportunity cost includes both implicit costs and explicit costs. If she goes to the movies, Kendall will give up the opportunity to earn \$20 plus the \$15 cost of the ticket.

B

Opportunity cost includes both implicit costs and explicit costs. If she goes to the movies, Kendall will give up the gross earnings from the dog-sitting job plus the cost of the ticket.

C

Economic surplus is defined as the benefit of an action minus its cost.

B

The benefit to you of borrowing the book from the library is the \$13 you save. Thus, you should borrow the book from the library if your cost of doing so is less than \$13.

C

Even though Alex has no out-of-pocket costs, by attending State U, Alex would be giving up 4 years' worth of earnings.

C

Monique's benefit from owning the truck is \$15,000 and the cost is \$12,000, so her economic surplus is \$3,000.

B

Monique's benefit from owning the truck is \$12,000 and the cost is \$12,000, so her economic surplus is \$0.

D

Rational individuals should make decisions based on the Cost-Benefit Principle, which means taking those actions that yield the largest possible economic surplus.

C

The economic surplus of taking an action is its benefit minus its cost.

D

The economic surplus of taking an action is its benefit minus its cost.

B

The Cost-Benefit Principle is not intended to exactly capture all features of human behavior. It just says that a rational decision maker should weigh costs and benefits.

A

The Cost-Benefit Principle is seen as a simple but useful model of how people should make choices.

D

Most people make sensible decisions most of the time.

C

Economic models focus on the critical features of human behavior.

C

People weigh costs and benefits, even if they are not consciously aware that they are doing so.

C

If Moe rationally chooses to spend time with Curly, then his benefit of spending time with Curly must outweigh his cost. Given that neither activity involves any explicit costs, the opportunity cost of spending time with Curly equals the benefit of studying. Thus, if Moe rationally chooses to spend time with Curly, it must be the case that his benefit from spending time with Curly is greater than his benefit from studying.

B

The cost includes both implicit and out-of-pocket costs.

B

If you don't use your frequent-flyer coupon, your total cost is $\$600 + \$900 = \$1,500$, but your benefit is only $\$1,400$.

B

If you use the coupon for the Miami trip you lose the value of using it to go to Atlanta.

B

If you use the frequent-flyer coupon to go to Miami, your out-of-pocket expenses would be $\$1,000$, and you would give up the ability to save $\$450$ to go to Atlanta. Thus, the total cost of using the frequent-flyer coupon to go to Miami would be $\$1,450$, which is higher than your willingness to pay.

C

If you use the frequent-flyer coupon to go to Miami, your out-of-pocket expenses would be $\$1,000$ and the opportunity cost of using the coupon would be $\$350$. Thus, the total cost of using the frequent-flyer coupon to go to Miami would be $\$1,350$, which is $\$50$ less than your willingness to pay.

C

The benefit of Sam staying home with the kids is the $\$12,000$ per year saved on childcare plus the value of Sam spending more time with the kids. The cost of Sam staying home with the kids is $\$25,000$ in forgone earnings. Thus, weighing costs and benefits, Sam should stay home with the kids if, and only if, the value of Sam spending more time with the kids is greater than $\$13,000$ per year.

B

The fact that you were willing to pay up to $\$35$ to go to the concert indicates that the benefit to you of going to the concert is $\$35$. The cost of going to the concert is the forgone value of working, which is $4 \times (\$11 - \$2)$, or $\$36$. [Note that we do not factor in the cost of the ticket since it's a sunk cost.] Since the benefit of going to the concert is less than the cost, you should not go to the concert.

D

The cost of going to the concert is the forgone value of working, which is $4 \times (\$11 - \$2)$, or \$36. [Note that we do not factor in the cost of the ticket since it's a sunk cost.]

C

By going to work, you give up attending the concert, which you value at \$35.

B

The benefit of working is $4 \times (\$11 - \$2)$, or \$36. The cost of working is the value you place on going to the concert or \$35 (since this is the most you would have been willing to pay for a ticket). Note that we do not factor in the cost of the ticket since it's a sunk cost. Subtracting the cost of working from the benefit of working, we see that the economic surplus of working is \$1.

A

Matt saves \$5 by purchasing the books at the university bookstore.

B

Matt saved \$4 (25% of \$16) by driving to campus to buy the ticket.

C

Because Matt was willing to drive to campus to save \$4 last week, we can assume that the cost of driving to campus is no more than \$4, so he should be willing to drive to campus to save \$5.

B

If he bought his textbooks at the university bookstore instead of online, Matt would save \$5, but the cost of driving to campus would be \$4, so his economic surplus would be \$1.

C

Marginal benefit is the increase in total benefit that results from carrying out one additional unit of an activity.

B

Marginal benefit is the increase in total benefit that results from carrying out one additional unit of an activity. By watching the 3rd game, total benefit increases from 120 to 125, so the marginal benefit is 5.

D

Marginal benefit is the increase in total benefit that results from carrying out one additional unit of an activity. By watching the 2nd game, the marginal benefit is 50.

A

Marginal benefit is the additional benefit of carrying out one additional unit of an activity.

A

Marginal cost is the additional cost of carrying out an additional unit of an activity.

B

Marginal cost is the additional cost of carrying out one additional unit of an activity.

D

Average cost is the total cost of undertaking n units of an activity divided by n .

C

To find the average cost, divide the total cost by the number of meals. Here, $\$600/150 = \4.00 .

B

To find the average cost, divide the total cost by the number of meals. Here, $\$750/150 = \5.00 .

A

To find the average cost, divide the total cost by the number of meals. Here, $\$600/1 = \600 .

D

The nonrefundable \$600 you paid for your meal plan is a sunk cost; no matter how many meals you eat up to 150, your marginal cost is 0.

A

Any average is the total divided by the number of units.

C

Your average benefit per day is your total benefit, \$10, divided by the number of days you take the bus, 5. So your average benefit per day is \$2.

B

When an average is falling, it must be true that the last unit included is less than the average over all prior units.

B

Total cost is \$100, so dividing by 4 gives \$25.

D

Total cost is \$100, so dividing by 4 gives \$25.

C

Total cost increases from \$40 to \$60 when you go from 2 to 3 units, so the marginal cost of the 3rd unit is \$20.

A

Total benefit increases from \$190 to \$210 when you go from 3 to 4 units, so the marginal benefit of the 4th unit is \$20.

A

Total benefit is \$160, so dividing by 2 gives \$80.

C

Total benefit increases from \$210 to \$220 when you go from 4 to 5 units, so the marginal benefit of the 5th unit is \$10.

B

Three units of the activity provide a net benefit (total benefit – total cost) of \$130, which is the highest of all the options given. Also, note that marginal benefit is greater than marginal cost for the first three units, but marginal benefit is less than marginal cost for units 4, 5, and 6.

D

Two units of the activity provide a net benefit (total benefit – total cost) of \$40, which is the highest of all the options given. Also, note that marginal benefit is greater than marginal cost for the first two units, but marginal benefit is less than marginal cost for units 3 through 6.

B

Average cost is the total cost divided by the number of units. Here $\$30/5 = \6 .

C

Total cost increases from \$12 to \$20 when you go from 3 to 4 units, so the marginal cost of the 4th unit is \$8.

C

Average benefit is total benefit divided by the number of units. Here $\$36/4 = \9 .

B

Total benefit increases from 40 to 42 when you go from 5 to 6 units, so the marginal benefit of the 6th unit is \$2.

B

Three units of this activity provide a net benefit (total benefit - total cost) of \$18, which is the highest of all the options given. Also, note that marginal benefit is greater than marginal cost for the first three units, but marginal benefit is less than marginal cost for units 4, 5, 6, and 7.

D

With three employees, average donations are \$17,321. Total donations equal average donations times the number of employees, or \$51,963 ($= \$17,321 \times 3$).

C

With 4 employees, average labor costs are \$9,500. Total labor costs equal average labor costs times the number of employees, or \$38,000 ($\$9,500 \times 4$).

A

Average benefit exceeds average costs for all 5 employees, so 5 employees will be hired. With 5 employees, total donations are \$67,080 and total costs are \$50,000, so the net benefit is \$17,080 ($= \$67,080 - \$50,000$).

C

When the number of employees increases from 1 to 2, total donations increase by \$12,426.

C

The total cost of 4 employees is \$38,000 ($= \$9,500 \times 4$). Thus, when the number of employees increases from 3 to 4, total labor costs increase by \$11,000 ($= \$38,000 - \$27,000$).

B

The marginal benefit of the 2nd employee (\$12,426) exceeds its marginal cost (\$9,000), but the marginal benefit of the 3rd employee (\$9,537) is less than its marginal cost (\$10,000). Thus, the University should hire 2 employees, and the net benefit will be \$25,426 ($= \$42,426 - 9,000$).

C

When more than 2 employees are hired, their marginal cost exceeds their marginal benefit.

A

Ginger should disregard the sunk cost of the phone and consider only the marginal benefit of receiving the rebate with the marginal cost of sending in the form.

A

In applying the Cost-Benefit Principle, it is a common decision pitfall to consider proportions rather than the amount saved.

C

The higher is the list price, the more you save.

D

Alexa produces 2 additional computers in her 3rd hour. The cost of the parts for these computers is \$1,200 ($= 2 \times \600). In addition, the firm has to pay Alexa \$40 for that hour. Thus, the marginal cost of producing the computers that Alexa can assemble in her 3rd hour is \$1,240.

B

Alexa produces 3 additional computers in her 2nd hour. The cost of the parts for these computers is \$1,800 ($= 3 \times \600). In addition, the firm has to pay Alexa \$40 for that hour. Thus, the marginal cost of producing the computers that Alexa can assemble in her 2nd hour is \$1,840.

C

The marginal benefit of the first hour of work is greater than its marginal cost. That is, the marginal cost of the first hour is \$2,440 (= \$2,400 for parts + \$40 for labor), and the marginal benefit is \$2,500 (= $4 \times \$625$). Marginal benefit is also greater than marginal cost for the 2nd and 3rd hours of work. For the 4th hour of work, however, marginal benefit is less than marginal cost. Thus, the firm should employ Alexa for 3 hours a day.

D

The marginal benefit of the first hour of work is greater than the marginal cost. That is, the marginal cost of the first hour is \$2,440 (= \$2,400 for parts + \$40 for labor), and the marginal benefit is \$2,600 (= $4 \times \$650$). Marginal benefit is also greater than or equal to marginal cost for the 2nd, 3rd, and 4th hours of work. Thus, the firm should employ Alexa for 4 hours.

C

Marginal benefit is the increase in total benefit that results from carrying out one additional unit of an activity.

C

Marginal benefit is the increase in total benefit that results from carrying out one additional unit of an activity.

C

Going from a 2.0GHz to a 2.5GHz computer increases total benefit from \$1,000 to \$1,400, so the marginal benefit is \$400.

C

To find total benefit of a 3.0GHz computer, add the marginal benefit of a 3.0GHz computer to the total benefit of 2.5GHz computer.

A

To find the total cost of a 2.5GHz computer, add the marginal cost of a 2.5GHz computer to the total cost of a 2.0GHz computer.

C

The total cost of a 2.5GHz computer is \$1,000 (= \$900 + \$100). Thus, going from a 2.5GHz to a 3.0GHz computer increases total cost from \$1,000 to \$1,200, meaning that marginal cost is \$200.

C

At 3.0GHz and below, marginal benefit is greater than its marginal cost. But for 3.5GHz and above, marginal benefit is less than marginal cost. So, a 3.0GHz computer should be purchased.

A

The marginal benefit of a 3.5GHz computer is \$200 ($= \$1,900 - \$1,700$), and its marginal cost is \$300 ($= \$1,500 - \$1,200$). Thus, its marginal benefit is less than its marginal cost.

C

At the time he makes his decision, the ticket price and the lost day's pay are sunk costs. Keeping the ticket requires sacrificing the \$70 he was offered for it.

A

The price of the nonrefundable ticket is a sunk cost, so the only thing that Jody should include in calculating the opportunity cost of going out to dinner, is the entertainment value of the concert.

C

The opportunity cost of seeing the movie is the economic surplus you give up by not seeing your favorite band ($\$50 - \$30 = \$20$) plus the \$15 you could have received by selling your movie ticket.

C

The information indicates that you are willing to drive downtown to save \$20, so you should also be willing to drive downtown to save \$25.

A

The average benefit of undertaking n units of an activity is the total benefit of undertaking n units divided by n . Thus, in the case, the average benefit is \$14 ($= \$56/4$).

A

The average benefit of undertaking n units of an activity is the total benefit of undertaking n units divided by n . Thus, in the case, the average benefit is $\$51 / 3 = \17.00 .

A

Each car wash costs \$15, so the marginal cost of a car wash is always \$15.

A

Each car wash costs \$19, so the marginal cost of a car wash is always \$19.

B

Going from 2 to 3 car washes increases total benefit from \$36 to \$48, so the marginal benefit of the 3rd car wash is \$12.

C

Going from 0 to 1 car washes increases total benefit from \$0 to \$24, so the marginal benefit of the first car wash is $\$24 - \$0 = \$24$.

B

The marginal cost of a car wash is always \$15. The marginal benefit of the 1st car wash is \$20, the marginal benefit of 2nd is \$16, the marginal benefit of the 3rd is \$12, the marginal benefit of the 4th is \$8, and the marginal benefit of the 5th is \$4. Thus, marginal benefit is less than marginal cost after the second car wash.

B

The marginal cost of a car wash is always \$5. The marginal benefit of the 1st car wash is \$18, the marginal benefit of 2nd is \$17, the marginal benefit of the 3rd is \$16, the marginal benefit of the 4th is \$15, and the marginal benefit of the 5th is \$12. Marginal benefit exceeds marginal cost for 5 of the washes.

C

Ushi will be able to pick $64 (= 2 \times 32)$ apples in the east orchard and $20 (= 2 \times 10)$ apples in the west orchard, or 84 apples in total.

A

If Ushi spends an additional hour in the east orchard, he has to spend 1 less hour in the west orchard, during which time he could have picked 10 apples.

B

If Ushi spends 1 hour in the east orchard he can pick 40 apples. If he spends 2 hours in the east orchard, he can pick $64 (= 32 \times 2)$ apples. Thus, the marginal benefit of the 2nd hour he spends picking in the east orchard is $24 (= 64 - 40)$.

B

The marginal cost to Ushi of spending an additional hour in the east orchard is always 10 apples. His marginal benefit of spending the first hour in the west orchard is 40 apples; his marginal benefit of the 2nd hour is 24 apples [= $(32 \times 2) - 40$]; his marginal benefit of the 3rd hour is 11 apples [= $(25 \times 3) - (32 \times 2)$]; and his marginal benefit of the 4th hour is 5 apples [= $(20 \times 4) - (25 \times 3)$]. So the marginal benefit of the 1st, 2nd and 3rd hour in the east orchard is greater than its marginal cost. But, the marginal benefit of the 4th hour is less than its marginal cost.

D

By definition, positive economic principles predict how people will behave, and normative economic principles indicate how they should behave.

C

Normative economic principles describe how people should behave; positive economic principles predict how they will behave.

B

Normative economic principles describe how people should behave; positive economic principles predict how they will behave.

C

Normative economic principles describe how people should behave; positive economic principles predict how they will behave. The editorial includes the word "should."

B

The Incentive Principle states that a person is more likely to take an action if its benefit rises, and less likely to do something if its cost rises.

C

The Incentive Principle predicts how people will behave. The Cost-Benefit Principle states how they should behave.

B

The Incentive Principle states that a person is more likely to take an action if its benefit rises, and less likely to do something if its cost rises.

D

The Incentive Principle states that a person is more likely to take an action if its benefit rises, and less likely to do something if its cost rises.

C

Microeconomics is the study of individual choice under scarcity and its implications for the behavior of prices and quantities in individual markets.

B

Macroeconomics is the study of the performance of national economies and the policies that governments use to try to improve that performance.

A

Microeconomics is the study of individual choice under scarcity and its implications for the behavior of prices and quantities in individual markets.

C

Macroeconomics is the study of the performance of national economies and the policies that governments use to try to improve that performance.

D

The federal budget is a topic related to the performance of the national economy, and therefore is a macroeconomic topic. The other issues relate to individual choices and individual markets, and so are microeconomic topics.

C

Macroeconomics is the study of the performance of national economies and the policies that governments use to try to improve that performance. SUV sales are directly related to individuals' choices about what to consume, and so are a microeconomic topic.

C

The two main categories of economic study are macroeconomics and microeconomics.

B

The study of individual markets, such as the market for professors, is part of microeconomics.

B

Microeconomics is the study of individual choice under scarcity and its implications for the behavior of prices and quantities in individual markets. Macroeconomics is the study of the performance of national economies and the policies that governments use to try to improve that performance.

A

Microeconomics focuses on individual choices.

B

Macroeconomics is the study of the performance of national economies and the policies that governments use to try to improve that performance.

B

Macroeconomics focuses on overall national economic growth and factors that affect the overall economy such as the impact of changing interest rates on total spending in the economy.

C

An economic naturalist is someone who uses insights from economics to make sense of observations from everyday life.

C

Applying the Incentive Principle, since the cost of providing 24-hour service has fallen (due to technological innovations such as ATMs), we would expect more banks to provide 24-hour service now than 100 years ago.

C

Applying the Incentive Principle, since the cost of gathering information has fallen, we would expect people today to gather more information today compared to 50 years ago.

B

Applying the Incentive Principle, we would expect people to try to wait in the shortest line (where the time cost of waiting is the lowest). So, if one line happens to be shorter than the others, customers will quickly join that line.

A

Applying the Incentive Principle, in response to higher costs on the toll road, we would expect fewer people to use the toll road.

B

Applying the Incentive Principle, if we observe more people going to college, then it is likely because either the benefit of going to college has gone up, or the cost of going to college has gone down. An increase in the unemployment rate lowers the opportunity cost of going to college because individuals who otherwise might have preferred to work will be less able to find jobs.

C

Applying the Incentive Principle as an economic naturalist, an increase in gas prices will increase the cost of driving an SUV, leading fewer people to purchase them.

C

Curly gave up something of value (a different trip using his frequent flyer miles) to visit Moe.

C

Applying the Cost-Benefit Principle, Enrique should drive if the marginal benefit of driving (saving half an hour) is greater than its marginal cost (\$0.50).

C

The opportunity cost of seeing the movie is the \$12 you pay for a ticket plus the forgone \$10 in economic surplus you would have received from working as a tutor.

B

The benefit of spending the afternoon working as a math tutor is \$10 ($\$45 - \35). The cost of spending the afternoon working as a math tutor is the \$8 ($\$20 - \12) in net benefit you would have received by going to the movies. Thus, your economic surplus from working as a math tutor instead of going to the movies is \$2.

A

To determine your best choice, calculate the value of each option as if it were your only choice. In this case, your economic surplus from going to the movies would be \$8 ($= \$20 - \12) and your economic surplus from working as a math tutor would be \$10 ($= \$45 - \35). Thus, your economic surplus would be higher if you worked as a math tutor.

A

Adam Smith understood that markets can fail when exchange is accompanied by side effects, which economists call externalities, that can be positive or negative.

A

In describing market forces, Smith said that the invisible hand leads business owners to *frequently* promote the interests of society—not *always*. Smith understood that markets often fail when private exchanges are accompanied by side effects, now known as externalities.

C

Smith argued that the business owner frequently—but not always—pursues the best interest of society. Some of Smith’s modern disciples denounce any attempt to regulate private markets as a grave threat to human welfare. Friedman, for example, argued that the federal government should not have its hand in markets at all, remarking once that government mismanagement could even create a shortage of sand in the Sahara desert.

D

In response to the negative externalities caused by huge SUVs, for example, some government responses, like a ban of heavy vehicles, might in the end create an even worse outcome. On the other hand, there are other forms of regulation that are less intrusive but still reduce the problematic CO2 emissions associated with unnecessarily large vehicles.

A

A \$1,500 annual tax would be high enough to discourage Tomás from buying a three-ton vehicle, since he only gets \$1,000 of value out of it. However, it would not discourage Jorge. The tax Jorge pays can be used to offset the environmental damage he causes, and then Jorge can still enjoy the increased profits. A one-time tax would not discourage Tomás if he plans on driving the vehicle for more than one year. A ban would prevent Jorge from purchasing a three-ton truck.

A

Adam Smith’s “invisible hand” often leads selfish pursuits to promote society’s interests but Smith also understood that markets can fail when exchange is accompanied by side effects, which economists call externalities, that can be positive or negative.

C

Adam Smith's "invisible hand" often leads selfish pursuits to promote society's interests but Smith also understood that markets can fail when exchange is accompanied by side effects, which economists call externalities, that can be positive or negative. Many modern economists tend to be less cautious about these situations and claim that private pursuit of self-interest is always in society's interest.