Economics: Canada in the Global Environment, 7e (Parkin)
Chapter 17 Public Goods and Common Resources

17.1 Classifying Goods and Resources

1) A public good is
A) nonrival and nonexcludable.
B) produced by monopolies.
C) rival and excludable.
D) rival and nonexcludable.
E) nonrival and excludable.
Answer: A
Diff: 1
Topic: Classifying Goods and Resources

2) Private goods are
A) nonrival and excludable.
B) nonrival and nonexcludable.
C) always produced in a non-regulated market.
D) rival and excludable.
E) rival and nonexcludable.
Answer: D
Diff: 2
Topic: Classifying Goods and Resources

3) When a good is nonrival and nonexcludable, it is a
A) natural monopoly.
B) private good.
C) regulated good.
D) public good.
E) common resource.
Answer: D
Diff: 2
Topic: Classifying Goods and Resources

4) When a good is rival and excludable, it is a
A) natural monopoly.
B) public good.
C) regulated good.
D) private good.
E) common resource.
Answer: D
Diff: 2
Topic: Classifying Goods and Resources

5) A natural monopoly is
A) nonrival.
B) excludable.
C) rival.
D) nonexcludable.
E) both A and B.
Answer: E
Diff: 2
Topic: Classifying Goods and Resources

6) If a good is a public good,
A) anyone can be excluded from enjoying its benefits.
B) no one can be excluded from enjoying its benefits.
C) consumers must pay a high price to enjoy its benefits.
D) consumers pay a low price.
E) economies of scale exist over the entire range of output for which there is a demand.
Answer: B
Diff: 2
Topic: Classifying Goods and Resources

7) An example of a public good is
A) national defence.
B) a Ford truck.
C) a loaf of bread.
D) a home computer.
E) a television.
Answer: A
Diff: 2
Topic: Classifying Goods and Resources

8) A good that is nonrival and excludable is a
A) private good.
B) public good.
C) government good.
D) natural monopoly.
E) common resource.
Answer: D
Diff: 2
Topic: Classifying Goods and Resources

9) A good that is rival and nonexcludable is a
A) private good.
B) public good.
C) government good.
D) regulated good.
E) common resource.
Answer: E
Diff: 2
Topic: Classifying Goods and Resources

10) A common resource is
A) regulated and excludable.
B) rival and nonexcludable.
C) nonrival and excludable.
D) rival and excludable.
E) nonrival and nonexcludable.
Answer: B
Diff: 2
Topic: Classifying Goods and Resources

11) Which one of the following goods is nonexcludable?
A) a taxi
B) a toll bridge
C) the atmosphere
D) an art museum
E) all of the above
Answer: C
Diff: 2
Topic: Classifying Goods and Resources

12) Which one of the following goods is excludable?
A) a city bus
B) a bridge that does not charge a toll
C) the atmosphere
D) a police force
E) all of the above
Answer: A
Diff: 2
Topic: Classifying Goods and Resources

13) Which one of the following goods exhibits nonexcludability?
A) a cheeseburger
B) the Internet
C) rides on the U.S. Space Shuttle
D) cable TV
E) air-traffic control
Answer: E
Diff: 2
Topic: Classifying Goods and Resources

14) When a city street is not congested, it is
A) a common resource
B) rival and excludable.
C) rival and nonexcludable.
D) a private good.
E) a public good.
Answer: E
Diff: 2
Topic: Classifying Goods and Resources
Source: Study Guide

15) When a city street is congested, it is
A) a common resource.
B) nonrival and nonexcludable.
C) nonrival and excludable.
D) a private good.
E) a public good.
Answer: A
Diff: 2
Topic: Classifying Goods and Resources

16) Suppose Brian Adams wants to perform a concert in the City Park in Corner Brook Newfoundland. The city officials argue that the only way the concert can be given permission to be performed in the City Park is if it is free of charge. If Brian Adams agrees to performing free of charge, then the concert is
A) excludable.
B) a private good.
C) nonexcludable.
D) rival.
E) rival and nonexcludable.
Answer: C
Diff: 2
Topic: Classifying Goods and Resources

17) Which of the following quotations describes a rival good?
A) "Mom, Ashley is looking at me."
B) "Mom, Morgan won't let me watch the Backyardigans because she is watching Dora the Explorer."
C) "Mom, Harrison won't let me in his room."
D) "Mom, Taylor told me on the phone that he is also watching the Backyardigans on TV at his house."
E) "Mom said everyone in this house gets to enjoy the flowers in the garden."
Answer: B
Diff: 2
Topic: Classifying Goods and Resources

18) Which of the following quotations describes a nonexcludable and nonrival good?
A) "Mom, Ashley is looking at me."
B) "Mom, Morgan won't let me watch the Backyardigans because she is watching Dora the Explorer."
C) "Mom, Harrison won't let me in his room."
D) "Mom, Taylor told me on the phone that he is also watching the Backyardigans on TV at his house, but I'm not allowed to go over there."
E) "Mom said everyone in this house gets to enjoy the flowers in the garden."
Answer: E
Diff: 3
Topic: Classifying Goods and Resources

19) A common resource is
A) rival and either excludable or nonexcludable.
B) excludable and either rival or nonrival.
C) rival and excludable.
D) rival and nonexcludable.
E) nonexcludable and either rival or nonrival.
Answer: D
Diff: 1
Topic: Classifying Goods and Resources

20) An example of common resource is
A) fish in the ocean.
B) air-traffic control.
C) the Ambassador Bridge which goes between Windsor Ontario and Detroit.
D) the Internet.
E) national defence.
Answer: A
Diff: 1
Topic: Classifying Goods and Resources

21) The air in the atmosphere is
A) nonrival and nonexcludable.
B) rival and nonexcludable.
C) nonrival and excludable.
D) rival and excludable.
E) a private good.
Answer: B
Diff: 1
Topic: Classifying Goods and Resources

22) Cable television and air-traffic control are similar to each other because both of them are
A) excludable.
B) nonexcludable.
C) nonrival.
D) rival.
E) private services.
Answer: C
Diff: 1
Topic: Classifying Goods and Resources

23) Although both cable television and air-traffic control are both nonrival, they differ from each other because
A) cable television is a private good and air-traffic control is a public good.
B) cable television is a public good and air-traffic control is a private good.
C) cable television is nonexcludable and air-traffic control is a public good.
D) cable television is nonexcludable and air-traffic control is excludable.
E) cable television is excludable and air-traffic control is nonexcludable.
Answer: E
Diff: 1
Topic: Classifying Goods and Resources

17.2 Public Goods

1) An economy's marginal social benefit curve for a private good is obtained by summing the individual marginal
A) cost curves horizontally.
B) cost curves vertically.
C) benefit curves horizontally.
D) benefit curves vertically.
E) benefit curves diagonally.
Answer: C
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

2) The marginal social benefit curve for a public good is derived by
A) adding the marginal benefits of all individuals at each quantity.
B) adding the quantities demanded by all individuals at each price.
C) surveying consumers and asking how much they use a certain good or service.
D) adding the total benefits for all consumers for a given quantity of the good.
E) finding the maximum amount someone is willing to pay for one more unit of the good.
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem

3) The economy's demand curve for a public good is obtained by summing the individual
A) marginal cost curves horizontally.
B) marginal cost curves vertically.
C) marginal benefit curves horizontally.
D) marginal benefit curves vertically.
E) benefit curves diagonally.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

Use the figure below to answer the following questions.

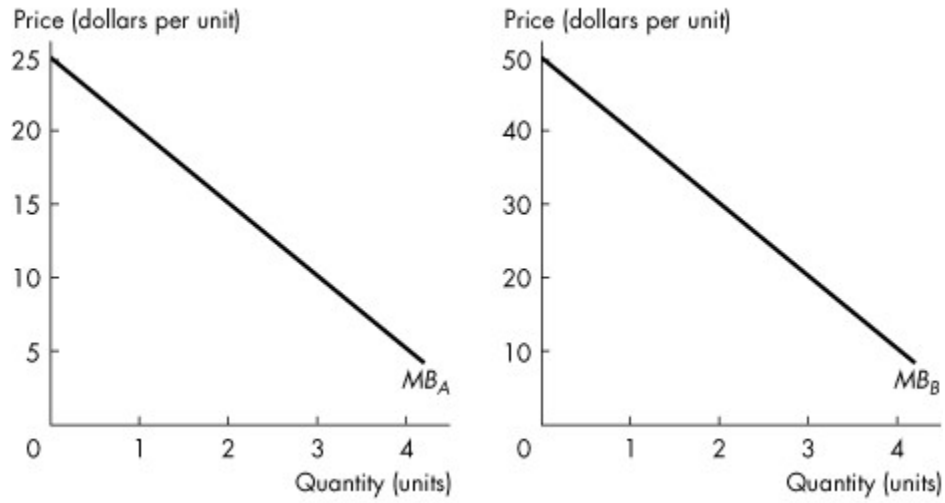

Figure 17.2.1

4) Refer to Figure 17.2.1. Curve MBA is Andrew's marginal benefit curve for a private good and curve MBB is Betty's marginal benefit curve for the same private good. If Andrew and Betty are the only two consumers in the economy, which point would be on the economy's marginal social benefit curve?
A) price of $20, quantity of 3 units
B) price of $20, quantity of 4 units
C) price of $10, quantity of 4 units
D) price of $30, quantity of 0 units
E) price of $60, quantity of 1 units
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem

5) Refer to Figure 17.2.1. Curve MBA is Andrew's marginal benefit curve for a public good and curve MBB is Betty's marginal benefit curve for the same public good. If Andrew and Betty are the only two consumers in the economy, which point would be on the economy's marginal social benefit curve?
A) price of $20, quantity of 3
B) price of $20, quantity of 4
C) price of $10, quantity of 4
D) price of $30, quantity of 0
E) price of $60, quantity of 1
Answer: E
Diff: 2
Topic: Public Goods and the Free-Rider Problem

6) For a private good, the economy's marginal social benefit curve is the _____ sum of the individual marginal benefit curves and for a public good, the economy's marginal social benefit curve is the _____ sum of the individual marginal benefit curves.
A) vertical; vertical
B) vertical; horizontal
C) horizontal; vertical
D) horizontal; horizontal
E) horizontal and vertical; vertical and horizontal
Answer: C
Diff: 2
Topic: Public Goods and the Free-Rider Problem

7) Suppose in a country there are only two persons. Person A is willing to pay $50 to have one unit of a public good produced; person B is willing to pay $60 to have one unit of a public good produced and $50 to have two units produced. A point on the country's marginal social benefit curve for this public good is a price of _____ and quantity demanded of _____.
A) $50; 2 units
B) $60; 1 unit
C) $110; 2 units
D) $110; 1 unit
E) $55; 1 unit
Answer: D
Diff: 3
Topic: Public Goods and the Free-Rider Problem

8) If the marginal social cost of producing a public good is greater than the marginal social benefit, then
A) more than the efficient quantity of the public good is being produced.
B) less than the efficient quantity of the public good is being produced.
C) the efficient quantity of the public good is being produced.
D) the public good is being produced by a private firm.
E) the public good must be a common resource.
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem

9) Free riding can occur if a good is
A) excludable and rival.
B) excludable and nonrival.
C) a private good.
D) nonexcludable and rival.
E) nonexcludable and nonrival.
Answer: E
Diff: 2
Topic: Public Goods and the Free-Rider Problem

10) Private provision of public goods
A) fails because the private firm will always go broke.
B) succeeds because public provision is often more costly.
C) succeeds if consumers expect to obtain a benefit from the consumption of the public good.
D) fails because of the free-rider problem.
E) fails because private firms generally charge higher prices than public firms, and therefore lose customers.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem

11) Public goods are provided by government because
A) governments are more efficient than private firms at producing public goods.
B) free-rider problems result in underproduction by private markets.
C) people value national defence very highly.
D) private firms will make an economic profit.
E) private firms do not take into account the impact of external costs.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem

12) The quantity of a public good produced by private provision
A) is less than the efficient quantity.
B) is equal to the efficient quantity.
C) is greater than the efficient quantity.
D) maximizes total public benefit.
E) maximizes net public benefit.
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

13) Governments provide public goods such as national defence because
A) governments are more efficient than private firms at producing public goods.
B) of the free-rider problem which results in underproduction by private firms.
C) people do not value national defence very highly.
D) of the potential that private firms will make excess profit.
E) of external costs.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

14) The efficient scale of provision of a public good occurs where
A) total benefit is at a maximum.
B) total benefit is at a minimum.
C) marginal social benefit is at a maximum.
D) marginal social benefit minus marginal social cost equals zero.
E) marginal social cost is at a minimum.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

15) Public choice theory predicts that government
A) acts to promote the redistribution of wealth and income.
B) acts to maximize the amount of campaign contributions.
C) acts to eliminate waste and promote an efficient allocation of resources.
D) makes choices that result in efficient provision of public goods.
E) makes choices that result in inefficient overprovision of public goods.
Answer: E
Diff: 2
Topic: Public Goods and the Free-Rider Problem

16) Public choice theory predicts that
A) voters are fully informed about the effects of policies.
B) voters are rationally ignorant.
C) governments make choices that achieve an efficient provision of public goods.
D) votes are based on reality, not perceptions.
E) votes are based on lobbyists' viewpoints.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem

17) According to public choice theory government failure occurs because
A) government officials do not listen to the pleading of special interest groups.
B) lobbyists write legislation.
C) government officials act in their own self-interest.
D) voters are fully informed about the effects of policies.
E) government cannot calculate the levels of externalities because there is no market for them.
Answer: C
Diff: 2
Topic: Public Goods and the Free-Rider Problem

18) To attract a majority of voters, a political party will
A) aim its message at the most enthusiastic groups.
B) aim its message at a small but loyal following.
C) present a political package aimed at making the wealthier voters better off.
D) present a political package aimed at making a majority of voters better off.
E) respond strongest to the most vigorous lobbyists.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem

19) The idea that the platforms of the political parties will tend to become similar over time is
A) not a reflection of reality.
B) true in theory but not true in actuality.
C) called the principle of minimum differentiation.
D) called the principle of minimal political confrontation.
E) the result of intense lobbying pressure.
Answer: C
Diff: 1
Topic: Public Goods and the Free-Rider Problem

20) Minimum differentiation among the political parties suggests that
A) the parties will have few ideas in common on their platforms.
B) the parties will offer few ideas on minimizing the size and scope of government.
C) the platforms of the parties will tend to become similar as they try to appeal to a majority of voters.
D) the platforms of the parties will tend to become dissimilar as they try to appeal to a loyal majority of voters.
E) the platforms of the parties will tend to have few, if any, new ideas.
Answer: C
Diff: 2
Topic: Public Goods and the Free-Rider Problem

21) Rational ignorance suggests that
A) all voters are ignorant.
B) all voters will be ignorant on issues that are not of special interest to them.
C) all voters will pursue information about each issue before voting.
D) low voter turnout is due to a lack of understanding of the importance of the political platforms .
E) it is easier to aim at the median voter because it is a less costly strategy for the politicians.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem

22) Rational ignorance suggests that a voter should stop acquiring more information about an issue when
A) the marginal benefit from acquiring the information equals zero.
B) the total cost of acquiring the information is minimized.
C) the total benefit from acquiring the information is maximized.
D) the marginal cost of acquiring the information is equal to the marginal benefit derived from the information.
E) the marginal cost of acquiring the information is greater than zero.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem

23) Rational ignorance suggests that voters will
A) understand defence technology before voting for defence policy.
B) understand the auditing procedures of the Canada Revenue Agency before voting for tax reform.
C) understand the chemistry of the atmosphere before voting for a clean-air act.
D) vote without complete information on many issues.
E) vote based on their complete trust in politicians and bureaucrats.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem

24) Public choice theory assumes those involved in the political process are motivated by
A) self-interest.
B) the desire to achieve efficiency.
C) dishonesty.
D) public spirit.
E) the desire for maximum profit.
Answer: A
Diff: 1
Topic: Public Goods and the Free-Rider Problem

25) If all voters are well informed about national defence, the quantity of national defence provided by the government will be
A) greater than the efficient quantity.
B) less than the efficient quantity.
C) the least costly quantity.
D) the efficient quantity.
E) the quantity that maximizes the budget of the Department of National Defence.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

26) If voters are rationally ignorant, the quantity of national defence provided by the government will be
A) greater than the efficient quantity.
B) less than the efficient quantity.
C) the least costly quantity.
D) the quantity that maximizes the budget of the Department of National Defence.
E) both A and D are correct.
Answer: E
Diff: 2
Topic: Public Goods and the Free-Rider Problem

27) Competition between two political parties will cause those parties to propose policies
A) that are quite different.
B) that are quite similar.
C) of rational ignorance.
D) that reduce the well-being of middle-income families and increasing the well-being of the rich and the poor.
E) that equate total costs and total benefits.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

28) The budget of a government department is likely to increase beyond the efficient quantity if
A) voters are well informed.
B) there is rational voter ignorance combined with special interest lobbying.
C) the political equilibrium can be described in terms of social interest theory.
D) bureaucrats are rationally ignorant.
E) there are negative externalities.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem

29) The budget of a government department is likely to be efficient if
A) voters are well informed.
B) there is rational voter ignorance combined with special interest lobbying.
C) the political equilibrium can be described in terms of public choice theory.
D) bureaucrats are rationally ignorant.
E) there are negative externalities.
Answer: A
Diff: 3
Topic: Public Goods and the Free-Rider Problem

30) According to public choice theory, a voter will tend to be well informed if the issue in question
A) is complicated and difficult to understand.
B) affects everyone a little.
C) is of special interest to a small group to which the voter does not belong.
D) has a large direct effect on the voter.
E) is important even if it does not directly affect the voter.
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem

31) Competitors who make themselves identical to appeal to the maximum number of voters illustrate the
A) principle of maximum differentiation.
B) principle of minimum differentiation.
C) principle of rational ignorance.
D) principle of nonrivalry.
E) principle of excludability.
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

32) All of the following statements regarding rational ignorance are true except
A) it results when the cost of information exceeds the expected benefit of acquiring the information.
B) it allows special interest groups to exert political influence.
C) combined with special interest groups, it yields inefficiency in the provision of public goods.
D) it leads to an efficient outcome.
E) none of the above.
Answer: D
Diff: 3
Topic: Public Goods and the Free-Rider Problem

Use the table below to answer the following questions.

Table 17.2.1

Number of Voters	Current Income	Income after Proposal A	Income after Proposal B	Income after Proposal C
25	$10,000	$15,000	$20,000	$5,000
25	$20,000	$25,000	$20,000	$18,000
25	$40,000	$45,000	$40,000	$38,000
25	$90,000	$75,000	$80,000	$99,000

33) In Table 17.2.1, which one of the proposals will have the greatest support?
A) Current income distribution
B) Proposal A
C) Proposal B
D) Proposal C
E) Proposal A or C
Answer: B
Diff: 3
Topic: Public Goods and the Free-Rider Problem

34) In Table 17.2.1, which one of the proposals will have the least support?
A) Current income distribution
B) Proposal A
C) Proposal B
D) Proposal C
E) Proposal A or C
Answer: D
Diff: 3
Topic: Public Goods and the Free-Rider Problem

35) In Table 17.2.1, which of the proposals would be supported by political parties according to the principle of minimum differentiation?
A) Current income distribution
B) Proposal A
C) Proposal B
D) Proposal C
E) Proposal A or C
Answer: B
Diff: 3
Topic: Public Goods and the Free-Rider Problem

36) Growing voter income can lead to the growth of the government sector because
A) public goods are income elastic.
B) public goods are income inelastic.
C) richer voters are more likely to be rationally ignorant.
D) richer voters do not care about overprovision of government goods.
E) none of the above.
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem

37) According to public choice theory, a voter will favour a candidate whose political program is
A) perceived by the voter to be in his self-interest.
B) best for the majority of the people.
C) closest to efficiency.
D) favoured by the median voter.
E) all of the above.
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

38) Rational ignorance
A) results when the cost of acquiring information exceeds the benefit of acquiring the information.
B) allows special interest groups to exert political influence.
C) combined with special-interest groups can yield inefficient provision of public goods.
D) results in all of the above.
E) results in none of the above.
Answer: D
Diff: 3
Topic: Public Goods and the Free-Rider Problem
Source: Study Guide

Use the figure below to answer the following question.

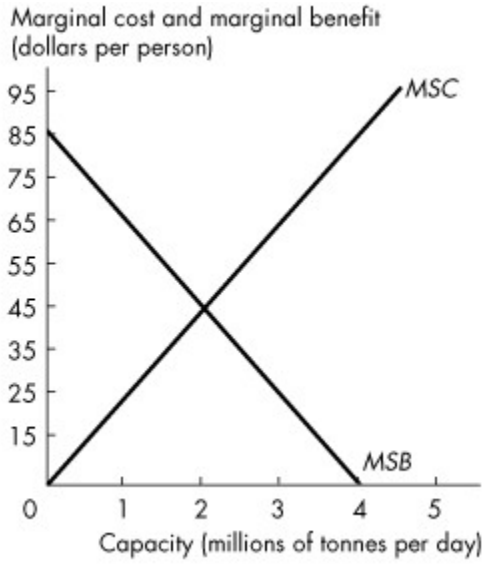

Figure 17.2.2

39) Refer to Figure 17.2.2. The graph shows the marginal social benefit and marginal social cost of a garbage disposal system in a city of 1 million people. If voters are well informed about the costs and benefits of the garbage disposal system, the political equilibrium of garbage is
A) 2.0 million tonnes a day.
B) 1.5 million tonnes a day.
C) 2.5 million tonnes a day.
D) 4.0 million tonnes a day.
E) 0 million tonnes a day.
Answer: A
Diff: 3
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

Use the figure below to answer the following question.

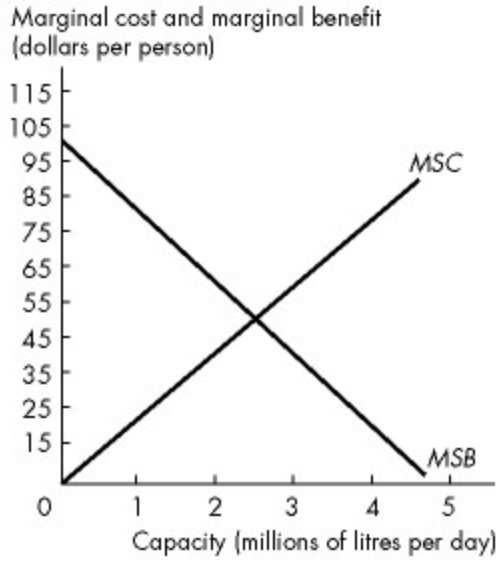

Figure 17.2.3

40) Refer to Figure 17.2.3. The graph provides information about a waste disposal system in a city of 1 million people. If the city installs the efficient capacity, then each person pays _____ in taxes.
A) $125
B) $62.50
C) $250
D) zero
E) $31.25
Answer: B
Diff: 3
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

41) Your city council is contemplating upgrading its traffic control system and the council believes that the bigger the computer it installs, the better job it can do. Elected officials want to install the scale of the system that will win the most votes. The city bureaucrats want to maximize the budget. Suppose that you are an economist and your job is to calculate the scale of the system that uses resources efficiently. Public choice theory predicts that the quantity chosen will result in _____. As an informed voter, you can attempt to influence the choice of the correct system by encouraging other voters to _____.
A) overprovision that maximizes the budget of the bureaucrats; vote only for officials that will provide the smaller efficient quantity
B) overprovision that maximizes the budget of the bureaucrats; increase their income elasticity of demand for the new traffic control system
C) the efficient quantity; decrease their income elasticity of demand for the new traffic control system
D) the efficient quantity; increase their income elasticity of demand for the new traffic control system
E) overprovision that minimizes the income elasticity of demand of bureaucrats; decrease their elasticity of demand for the new traffic control system
Answer: A
Diff: 3
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

42) According to _____ theory, governments make choices that result in an _____ provision of public goods. This outcome occurs in _____.
A) public choice; efficient; political markets in which voters are rationally ignorant
B) social interest; efficient; a perfect political system in which voters are fully informed about the effects of policies
C) social interest; efficient; political markets in which voters are rationally ignorant
D) public choice; inefficient; a perfect political system in which voters are full informed about the effects of policies
E) social interest; inefficient; political markets in which voters are rationally ignorant
Answer: B
Diff: 3
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

17.3 Common Resources

1) Which of the following achieves the efficient use of a common resource?
A) property rights, quotas, and individual transferable quotas
B) property rights, individual transferable quotas, and subsidies
C) property rights, quotas, and subsidies
D) individual transferable quotas and copyrights
E) quotas, individual transferable quotas, and copyrights
Answer: A
Diff: 2
Topic: Common Resources

2) One way to alleviate the tragedy of the commons is to
A) eliminate quotas for using the common resource.
B) make the resource private property.
C) allow all individuals to use the common resource free of charge.
D) distribute common resources among those individuals who really need the resource free of charge.
E) set a price of $1 per unit of the common resource because it is an affordable price.
Answer: B
Diff: 2
Topic: Common Resources

3) An individual transferable quota is a production limit that
A) has a price equal to marginal cost.
B) is assigned to every producer in the industry at a predetermined price.
C) is assigned to an individual who must transfer the quota to anyone the government assigns.
D) is assigned to an individual who is free to transfer the quota to someone else.
E) has a price equal to marginal benefit.
Answer: D
Diff: 2
Topic: Common Resources

4) The "tragedy of the commons" refers to
A) the inability of lower income groups to achieve a higher level of education.
B) the absence of incentives to prevent the overuse and depletion of a commonly used resource.
C) the acceptance of deplorable working conditions by those who lack the human capital to obtain a better job.
D) the tendency for bureaucrats to maximize their budget.
E) farmers who allow their livestock to overgraze their fields.
Answer: B
Diff: 2
Topic: Common Resources

5) The absence of incentives to prevent the overuse and depletion of a commonly used resource is referred to as
A) unsustainable production.
B) sustainable production.
C) the tragedy of the commons.
D) rational ignorance.
E) irrational production.
Answer: C
Diff: 2
Topic: Common Resources

6) Sustainable production is
A) the rate of production that can be maintained indefinitely.
B) the production output with the lowest average total cost.
C) the production output where MC=ATC.
D) the rate of production that maximizes marginal private benefit.
E) the rate of production where MB=MC.
Answer: A
Diff: 2
Topic: Common Resources

7) Common resources are overused because
A) the marginal private benefit of operating a boat is the quantity of fish a boat can catch.
B) the social costs outweigh the private costs.
C) the marginal private benefit will always exceed the marginal social cost.
D) the marginal social benefit is not taken into consideration by producers.
E) social costs are controlled by quotas.
Answer: D
Diff: 2
Topic: Common Resources

Use the figure below to answer the following questions.

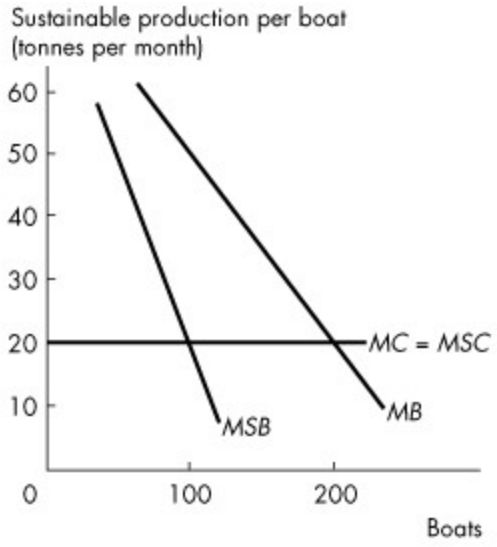

Figure 17.3.1

8) Refer to Figure 17.3.1. What is the efficient use of this common resource?
A) 100 boats producing 20 tonnes per boat
B) 100 boats producing 50 tonnes per boat
C) 200 boats producing 20 tonnes per boat
D) 200 boats producing 50 tonnes per boat
E) There is no efficient use of this common resource.
Answer: B
Diff: 2
Topic: Common Resources

9) Refer to Figure 17.3.1. What would be use of this common resource if boat owners consider only the marginal private benefit?
A) 100 boats producing 20 tonnes per boat
B) 100 boats producing 50 tonnes per boat
C) 200 boats producing 20 tonnes per boat
D) 200 boats producing 50 tonnes per boat
E) A common resource cannot be privately used.
Answer: C
Diff: 2
Topic: Common Resources

Use the figure below to answer the following questions.

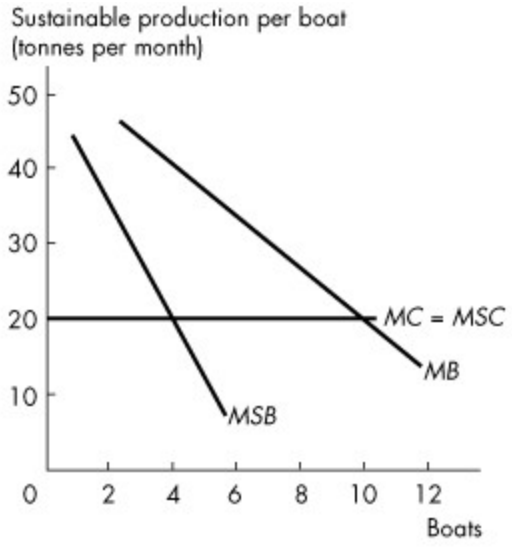

Figure 17.3.2

10) Refer Figure 17.3.2. If individual transfer quotas (ITQs) are used to achieve an efficient outcome, the market price of an ITQs equals
A) 20 tonnes of fish per month.
B) 30 tonnes of fish per month.
C) 40 tonnes of fish per month.
D) 5 boats of fish per month.
E) 10 boats of fish per month.
Answer: A
Diff: 2
Topic: Common Resources

11) Refer Figure 17.3.2. What would a production quota be set at to achieve an efficient outcome ?
A) 4 boats
B) 2 boats
C) 6 boats
D) 8 boats
E) zero boats
Answer: A
Diff: 2
Topic: Common Resources

12) For a common resource like fish, marginal private benefit of an additional boat is the _____ and the marginal social benefit is the _____.
A) catch per boat; total fish caught
B) total fish caught; change in total catch from an additional boat
C) change in total catch from an additional boat; catch per boat
D) catch per boat; change in total catch from an additional boat
E) change in total catch from an additional boat; total fish caught
Answer: D
Diff: 2
Topic: Common Resources
Source: Study Guide

13) In the equilibrium for a common resource with no government regulation,
A) marginal social benefit is greater than marginal private benefit.
B) marginal social benefit equals marginal private benefit.
C) marginal social benefit equals marginal cost.
D) marginal social benefit is greater than marginal cost.
E) marginal private benefit equals marginal cost.
Answer: E
Diff: 2
Topic: Common Resources
Source: Study Guide

14) The tragedy of the commons is the absence of incentives to
A) reduce marginal cost of common resources.
B) prevent underuse of common resources.
C) prevent overuse of common resources.
D) discover new common resources.
E) export wool in sixteenth-century England.
Answer: C
Diff: 2
Topic: Common Resources
Source: Study Guide

Refer to the table below to answer the following questions.

Table 17.3.1

Number of cows	Milk (litres per day)
10	20
20	40
30	70
40	110
50	110
60	70
70	40
80	20
90	0

15) Refer to Table 17.3.1. The table above gives the number of cows and the milk they can produce on a common pasture. The marginal cost of allowing a cow to graze is $0 per cow. With no government intervention, the equilibrium number of cows is
A) 40.
B) 50.
C) 90.
D) zero.
E) 60.
Answer: C
Topic: Inefficient Equilibrium
Skill: Analytical
AACSB: Analytical Skills

16) Refer to Table 17.3.1. The table above gives the number of cows and the milk they can produce on a common pasture. The marginal cost of allowing a cow to graze is $0 per cow. The efficient number of cows is
A) 5.
B) 25.
C) 45.
D) 90.
E) 40
Answer: C
Topic: Efficient Use of the Commons
Skill: Analytical
AACSB: Analytical Skills

17) When a quota is used to remedy the problem of the commons, then
A) the quota is set so that use of the resource is where marginal private benefit equals marginal cost.
B) the quota is set so that use of the resource is where marginal private benefit equals marginal social benefit.
C) the market equilibrium, but not the efficient outcome, is achieved.
D) all users of the resource have an incentive to cheat on the quota.
E) the quota is set so that marginal social benefit is maximized.
Answer: D
Topic: Quota
Skill: Conceptual
AACSB: Reflective Thinking

Refer to the table below to answer the following questions.

Table 17.3.2

Number of boats	Total catch (tonnes per month)
100	7,000
200	12,000
300	15,000
400	16,000
500	15,000
600	12,000

18) Refer to Table 17.3.2. The table above shows how the sustainable catch of fish in the Mediterranean Sea depends on the number of boats that go fishing. The marginal cost of operating a fishing boat is the same for all producers, the equivalent of 30 tonnes of fish a month. When 400 boats go fishing in the Mediterranean Sea, the marginal private benefit of operating a boat is
A) zero.
B) 20 tonnes of fish per month.
C) 50 tonnes of fish per month.
D) 40 tonnes of fish per month.
E) 10 tonnes of fish per month.
Answer: D
Diff: 2
Topic: Marginal Private Benefit
Skill: Analytical
AACSB: Analytical Skills

19) Refer to Table 17.3.2. The table above shows how the sustainable catch of fish in the Mediterranean Sea depends on the number of boats that go fishing. The marginal cost of operating a fishing boat is the same for all producers, the equivalent of 30 tonnes of fish a month. When 400 boats go fishing in the Mediterranean Sea, the marginal social benefit of operating a boat is
A) zero.
B) 20 tonnes of fish per month.
C) 50 tonnes of fish per month.
D) 40 tonnes of fish per month.
E) 10 tonnes of fish per month.
Answer: A
Diff: 2
Topic: Marginal Social Benefit
Skill: Analytical
AACSB: Analytical Skills

20) Refer to Table 17.3.2. The table above shows how the sustainable catch of fish in the Mediterranean Sea depends on the number of boats that go fishing. The marginal cost of operating a fishing boat is the same for all producers, the equivalent of 30 tonnes of fish a month. With no regulation of fishing in the Mediterranean Sea, the equilibrium number of boats is
A) 250
B) 500
C) 300
D) 400
E) zero
Answer: B
Diff: 2
Topic: Inefficient Equilibrium
Skill: Analytical
AACSB: Analytical Skills

21) Refer to Table 17.3.2. The table above shows how the sustainable catch of fish in the Mediterranean Sea depends on the number of boats that go fishing. The marginal cost of operating a fishing boat is the same for all producers, the equivalent of 30 tonnes of fish a month. The efficient number of fishing boats in the Mediterranean Sea is
A) 500
B) 300
C) 250
D) 400
E) zero
Answer: C
Diff: 2
Topic: Efficient Use of the Commons
Skill: Analytical
AACSB: Analytical Skills

Refer to the table below to answer the following questions.

Table 17.3.3

Number of wells	Oil (barrels per month)
8	672
16	1,088
24	1,248
32	1,152
40	800

22) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. What is the marginal private benefit if 24 wells are drilled?
A) 160 barrels
B) 4 barrels
C) 52 barrels
D) 36 barrels
E) 44 barrels
Answer: C
Topic: Marginal Private Benefit
Skill: Analytical
AACSB: Analytical Skills

23) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. What is the marginal private benefit if 16 wells are drilled?
A) 416 barrels
B) 8 barrels
C) 36 barrels
D) 68 barrels
E) 76 barrels
Answer: D
Topic: Marginal Private Benefit
Skill: Analytical
AACSB: Analytical Skills

24) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. With no government intervention, what is the equilibrium number of wells?
A) 16
B) 24
C) 32
D) 40
E) 8
Answer: C
Topic: Inefficient Equilibrium
Skill: Analytical
AACSB: Analytical Skills

25) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. With no government intervention, what is the quantity of oil produced?
A) 672 barrels
B) 1,152 barrels
C) 1,088 barrels
D) 1,248 barrels
E) 800 barrels
Answer: B
Topic: Inefficient Equilibrium
Skill: Analytical
AACSB: Analytical Skills

26) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. What is the marginal social benefit if 12 wells are drilled?
A) zero
B) 76 barrels
C) 52 barrels
D) 28 barrels
E) 12 barrels
Answer: C
Topic: Marginal Social Benefit
Skill: Analytical
AACSB: Analytical Skills

27) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. What is the marginal social benefit if 20 wells are drilled?
A) zero
B) 52 barrels
C) 20 barrels
D) 28 barrels
E) 76 barrels
Answer: C
Topic: Marginal Social Benefit
Skill: Analytical
AACSB: Analytical Skills

28) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. What is the efficient number of wells?
A) 16
B) 24
C) 32
D) 40
E) 8
Answer: A
Topic: Efficient Use of the Commons
Skill: Analytical
AACSB: Analytical Skills

29) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 366 barrels of oil. What is the efficient quantity of oil to produce?
A) 672 barrels
B) 1,152 barrels
C) 1,088 barrels
D) 1,248 barrels
E) 800 barrels
Answer: C
Topic: Efficient Use of the Commons
Skill: Analytical
AACSB: Analytical Skills

30) Refer to Table 17.3.3. People in Petroville all own an equal share of an oil reserve. Each person has the right to drill a well and take oil from the reserve. The table above shows how the amount of oil produced depends on the number of wells. The marginal social cost of a well equals the marginal private cost and is the equivalent of 36 barrels of oil. If the ITQs were issued for the efficient quantity of oil production, what would be the market price of an ITQ?
A) 32 barrels
B) 52 barrels
C) 36 barrels
D) 68 barrels
E) 1,088 barrels
Answer: A
Topic: Individual Transferable Quota
Skill: Analytical
AACSB: Analytical Skills

Use the table below to answer the following question.

Table 17.3.4

Number of wells	Oil output (litres per day)	Marginal social benefits (litres per well)	Marginal private benefits (litres per well)
0	0		
		9.0	
2	18		9.0
		8.0	
4	34		8.5
		7.0	
6	48		8.0

31) Refer to Table 17.3.4. An oil reserve runs under plots of land owned by seven people. Each person has the right to sink a well on her or his land and take oil from the reserve. The amount of oil that is produced depends on the number of wells sunk and is shown in the table. The marginal private cost of a well is the equivalent of 7.0 litres a day. The efficient number of wells is _____ and the efficient quantity of oil to produce is _____ litres a day.
A) 2; 18
B) 3; 26
C) 4; 34
D) 5; 41
E) 6; 48
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

32) Setting a production quota does not always achieve the efficient use of a common resource because _____.
A) marginal cost differs for each producer and it is in everyone's self-interest to cheat and produce more than the assigned quota
B) the marginal private benefit from a production quota is zero
C) marginal cost differs for each producer and the marginal social benefit from a production quota is zero
D) a production quota does not totally eliminate the problem of free-ridership of a common resource
E) none of the above
Answer: A
Topic: Individual Transferable Quota
Skill: Analytical
Source: MyEconLab
AACSB: Analytical Skills

33) All of the following statements are true except _____.
A) the market price of an ITQ equals the marginal social benefit minus the marginal cost
B) when an ITQ system is used in a fishing market, boat owners with a low marginal cost are willing and able to pay more for a quota than are boat owners with a higher marginal cost
C) individual differences in marginal cost do not prevent an ITQ system from delivering the efficient outcome
D) an ITQ is a production limit that is assigned to an individual who is free to transfer the quota to someone else
E) Canada does not use ITQs
Answer: A
Topic: Individual Transferable Quota
Skill: Analytical
Source: MyEconLab
AACSB: Analytical Skills

Use the table below to answer the following question.

Table 17.3.5

Number of fishing boats	Value of cod caught (thousands of dollars per month)
0	0
20	12,000
40	21,000
60	27,000
80	30,000

34) Refer to Table 17.3.5. The table shows the value of cod caught in the North Atlantic Ocean by American, Canadian, and European fishing boats. The marginal cost of operating a boat is $80,000 a month. When the number of fishing boats is 60, the marginal private benefit of each boat is
A) $300,000
B) $375,000
C) $450,000
D) $150,000
E) $225,000
Answer: C
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

Use the table below to answer the following question.

Table 17.3.6

Number of boats	Value of cod caught (thousands of dollars per month)
0	0
10	4,000
20	7,200
30	9,600
40	11,200

35) Refer to Table 17.3.6. The table shows the value of cod caught in the North Atlantic Ocean by American, Canadian, and European fishing boats. When the number of fishing boats increases from 10 to 20, the marginal social benefit is
A) $320,000
B) $400,000
C) $360,000
D) $240,000
E) $280,000
Answer: A
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

Use the table below to answer the following question.

Table 17.3.7

Number of boats	Value of cod caught (thousands of dollars per month)
0	0
40	8,000
80	14,000
120	18,000
160	20,000
200	20,000
240	18,000
280	14,000

36) Refer to Table 17.3.7. The table shows the value of cod caught in the North Atlantic Ocean by American, Canadian, and European fishing boats. The marginal cost of operating a cod fishing boat is $75,000 a month. With no regulation of cod fishing, the equilibrium number of boats is
A) 120
B) 160
C) 200
D) 240
E) 280
Answer: D
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab

Use the table below to answer the following question.

Table 17.3.8

Number of boats	Value of cod caught (thousands of dollars per month)
0	0
10	16,000
20	28,000
30	36,000
40	40,000
50	40,000
60	36,000

37) Refer to Table 17.3.8. The table shows the value of cod caught in the North Atlantic Ocean by American, Canadian, and European fishing boats. The marginal cost of operating a boat is $800,000 a month. The efficient number of boats is
A) 15
B) 25
C) 35
D) 45
E) 55
Answer: B
Diff: 2
Topic: Public Goods and the Free-Rider Problem
Source: MyEconLab