Chapter 10 Testbank

1. When part of the cost of an activity falls on people not pursuing the activity, it is call a(n)

   A. external benefit.
   B. prisoner's dilemma.
   C. negative externality.
   D. positive externality.

2. Which of the following is an example of an activity with an external cost?

   A. Raising honeybees where neighbors on all sides grow apples
   B. Keeping the front yard clean
   C. Speeding on the highway
   D. Having to buy batteries for the new remote that came with a TV

3. When some fraction of the benefit of an activity is received by people not participating in the activity, it is called a(n)

   A. winner's curse.
   B. positive externality.
   C. external cost.
   D. efficient allocation.

4. For most people, baking cinnamon rolls generates _____ externality, and burning tires generates _____ externality.

A. a positive; a negative.

B. a negative; a positive.

C. a positive, no.

D. no; a negative.

5. Which of the following is not an example of an activity with external benefits?

A. Eating a sandwich in the dining hall

B. Planting flowers in the front yard

C. Staying home from class when you have the flu

D. Having your smoking car repaired

6. The existence of a negative externality will result in

A. a less than optimal level of production.

B. a greater than optimal level of production.

C. prices that are artificially high.

D. elimination of deadweight loss.

7. Laws that regulate the behavior of firms and of individuals are often enacted in order to

A. eliminate all negative externalities.

B. convert private benefits into positive externalities.

C. correct resource misallocation due to externalities.

D. redistribute income more equitably.

8. If the market equilibrium quantity is greater than the socially optimal quantity, one can infer that

   A. the private supply curve for the activity is to the left of the socially optimal supply curve.
   B. the private demand curve for the activity is below the socially optimal demand.
   C. the production of this good has a positive externality.
   D. the production of this good has a negative externality.

9. If the market equilibrium quantity is less than the socially optimal quantity, one can infer that

   A. the private supply curve for the activity is below the socially optimal supply curve.
   B. the private demand curve for the activity is above the socially optimal demand.
   C. the production of this good has a positive externality.
   D. the production of this good has a negative externality.

10. If the equilibrium quantity is equal to the socially optimal quantity, one can infer that

   A. the supply curve for the activity is below the socially optimal supply curve.
   B. the production of this good has no externality.
   C. the production of this good has a positive externality.
   D. the production of this good has a negative externality.

11. In the case of either a positive or negative externality, it will always be true that, relative to the social optimum,

   A. the market price will be too low.
   B. the market price will be too high.
   C. the market price will send an inaccurate signal of true cost or benefit.
   D. the quantity provided by the market will be too large.

12. Suppose coal mining produces a negative externality in the form of polluted streams. One can deduce that the unregulated

    A. price of coal is too high.
    B. quantity of coal produced is too small.
    C. quantity of coal produced is too high.
    D. supply curve lies to the left of the regulated supply curve.

13. In the case of _____, the invisible hand fails to generate the efficient outcome because buyers and sellers only take their self-interests into account.

    A. either an external cost or an external benefit.
    B. an external cost.
    C. an external benefit.
    D. neither an external cost nor an external benefit.

14. If the external cost of an activity is added to the private costs, then the

    A. supply curve shifts right.
    B. quantity supplied rises.
    C. supply curve shifts left.
    D. demand curve shifts right.

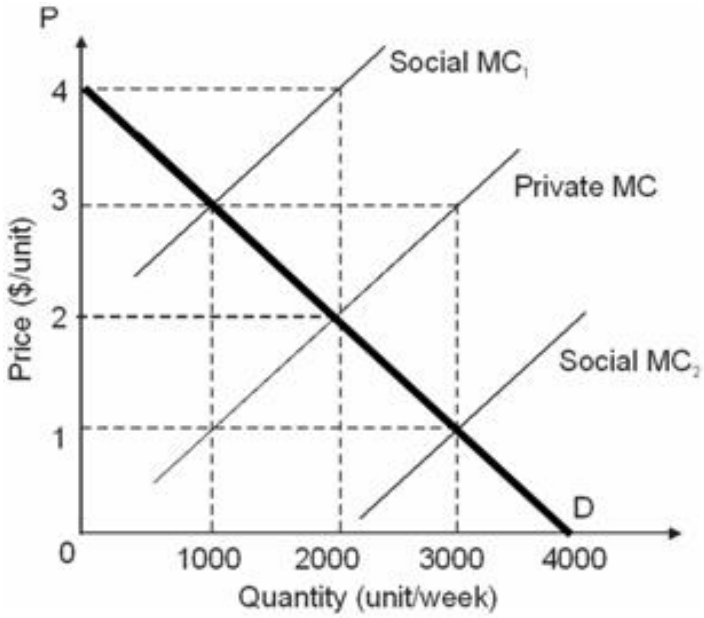
15. If the external benefit of an activity is added to the private benefits, then the

A. demand curve shifts left.

B. quantity demanded rises.

C. demand curve shifts right.

D. supply curve shifts right.



16. Refer to the figure above. When the market has no external costs or benefits, the resulting equilibrium quantity is ____ and price is _____.

A. 0; $4

B. 1000; $3

C. 2000; $2

D. 3000; $1

17. Refer to the figure above. Suppose that production of this good is accompanied by an external cost, the private market equilibrium quantity is ____ and the private market equilibrium price is _____.

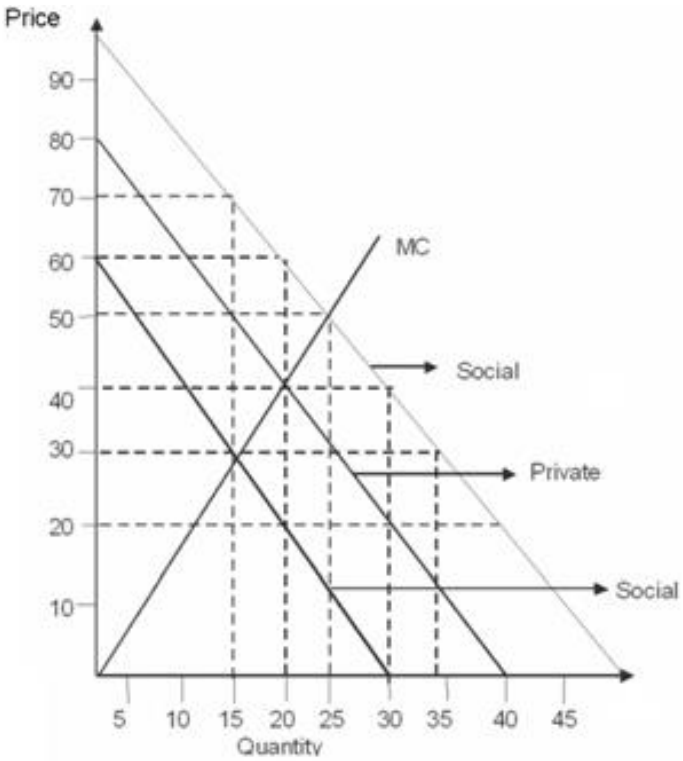
A. 0; $4
B. 1000; $3
C. 2000; $2
D. 3000; $1

18. Refer to the figure above. Suppose that production of this good is accompanied by an external cost illustrated on this graph. The private market equilibrium quantity is _____ the socially optimal quantity.

A. equal to
B. 1000 units less than
C. 1000 units more than
D. 2000 units more than

19. Refer to the figure above. Suppose, production of this good is accompanied by an external cost = $2/unit, social MC equals _____.

A. private MC - $2
B. private MC + $2
C. private MC - $0
D. private demand - $2



20. Refer to the figure above. When the market has no external costs or benefits, the resulting equilibrium quantity is ____ and price is _____.

A. 15; $30

B. 20; $40

C. 25; $50

D. 30; $20

21. Refer to the figure above. Suppose that production of this good is accompanied by an external benefit, the private market equilibrium quantity is ____ and the private market equilibrium price is _____.

A. 15; $30

B. 20; $40

C. 25; $50

D. 30; $20

22. Refer to the figure above. Suppose that production of this good is accompanied by an external benefit illustrated on this graph. The private market equilibrium quantity is _____ the socially optimal quantity.

A. equal to
B. 10 units less than
C. 5 units less than
D. 5 units more than

23. Refer to the figure above. Suppose production of this good is accompanied by an external benefit = $15/unit, social demand equals _____.

A. private demand - $15
B. private demand + $15
C. private demand + $0
D. marginal cost - $15

24. The presence of an external benefit that is not corrected results in

A. additional total economic surplus.
B. deadweight loss.
C. a larger economic pie to be distributed among everyone.
D. taxation.

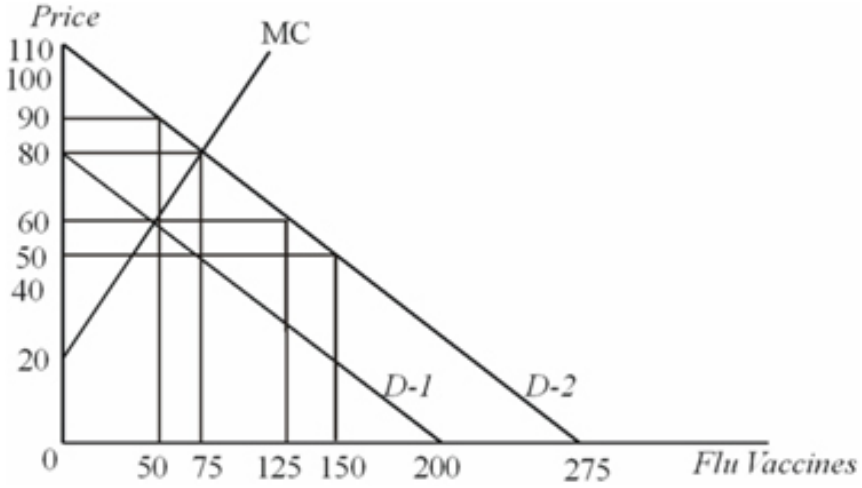
25. An external benefit implies that private markets will provide ____ and an external cost implies that private markets will provide _____ of the good (relative to the social optimum).

A. too much; too much
B. too little; too little
C. too much; too little
D. too little; too much

26. Private incentives in markets with external benefits lead to _____; private incentives in markets with external costs lead to _____.

A. maximum total economic surplus; deadweight loss
B. deadweight loss; deadweight loss
C. excess total economic surplus; efficiency
D. excess total economic surplus; deadweight loss

Suppose that a vaccine is developed for a highly contagious strain of flu. The likelihood that anyone will get this flu decreases as more people receive the vaccine.



27. Private incentives will lead to _____ people receiving the vaccine at a cost of _____.

A. 75; $80

B. 75; $50

C. 50; $60

D. 50; $90

28. The dollar value of the external _____ is _____.

A. benefit; $30

B. cost; $20

C. benefit; $20

D. benefit; $75

29. Private benefits are measured by _____ and social benefits are measured by _____.

A. D-1; MC

B. D-2; MC

C. D-1; D-2

D. D-2; D-1

30. If the flu vaccine is provided by private markets, deadweight loss will be _____.

A. zero

B. $375

C. $500

D. $1,125

31. The socially optimal number of vaccines is _____.

A. 50

B. 75

C. 125

D. 150

32. This externality could most effectively be corrected by

A. taxing vaccines.

B. encouraging people to negotiate private payments to those who receive the vaccine.

C. subsidizing vaccines.

D. free provision of 275 vaccines.

33. The major implication of the _____ is that individuals can solve many externalities if they can buy and sell the right to generate the externality.

A. Sherman Act

B. Coase Theorem

C. tragedy of the commons

D. prisoner's dilemma

Tamer lives in a residential neighborhood that prides itself on well-groomed lawns. Tamer's neighbors find that the collective marginal benefit of someone else's well-groomed lawn is $10. Tamer, however, dislikes yard work and receives zero net benefit from an unkempt lawn and a net benefit of -$1 for a well-groomed lawn – the cost of maintaining the lawn is a dollar more than the benefit of having a well-groomed lawn.

	Unkempt	Well-groomed
Net Value to Tamer	0	-1
Net Value to Tamer's neighbors	0	+10

34. The issue of Tamer, his neighbors, and the state of his lawn is an example of a(n)

A. externality.

B. commitment problem.

C. prisoner's dilemma.

D. positional externality.

35. If Tamer acts independently, Tamer's lawn will be _____ and total economic surplus to the neighborhood will be _____.

A. well groomed; $10
B. well groomed; $5
C. unkempt; 0
D. unkempt; $5

36. If Tamer's lawn is unkempt, the situation is _____ because the total economic surplus is _____.

A. efficient; nonnegative
B. inefficient; larger than it could have been
C. efficient; as large as possible
D. inefficient; smaller than it could have been

37. The Coase Theorem suggests that

A. the rest of the neighborhood will have to tolerate Tamer's lawn.
B. Tamer could pay the neighbors to stop complaining about the lawn, making everyone in the neighborhood better off.
C. Tamer's neighbors could pay Tamer to have a well-groomed lawn, making Tamer and the neighbors better off.
D. Tamer's neighbors could pay Tamer to have a well-groomed lawn, making Tamer better off and the neighbors worse off.

38. Tamer's neighbors would be willing to pay Tamer _____ to keep a well groomed lawn.

A. $1.

B. more than $1 but less than $5.

C. $5.

D. no more than $10.

39. Tamer would be willing to keep a well-groomed lawn if the neighbors paid him

A. less than $1.

B. $2.

C. no less than $5.

D. no less than $10.

40. If Tamer's neighbors pay Tamer $5 to maintain his lawn, Tamer will have a net benefit of ___ and the neighbors will have a net benefit of _____.

A. +$5; -$5

B. +$4; +$5

C. +$9; 0

D. +$5; $4

Suppose there are ten people playing cards in a room. One of them wants to smoke a cigar; nine of them dislike the smell of cigar smoke. The smoker values the privilege of smoking at $5, and each of the other nine occupants of the room would be willing to pay fifty cents for clean air in the room. The rules governing use of the room state that smoking is not allowed unless everyone agrees to allow smoking.

41. Which outcome is consistent with the Coase Theorem?

A. The cigar smoker will not be able to smoke because there are more non-smokers in the room.
B. The cigar smoker will pay each other occupant fifty-five cents, and they will agree to allow smoking.
C. The cigar smoker will smoke because the external cost of smoking does not need to be taken into consideration.
D. The cigar smoker will pay each other occupant a dollar, and they will agree to allow smoking.

42. What is the total economic surplus if the cigar smoker refrains from smoking?

A. -$4.50
B. -$.50
C. $4.50
D. $9.50

43. If the cigar smoker paid each other occupant fifty cents for the right to smoke, the cigar smoker would be _____ and the other occupants would be _____.

A. better off; worse off.
B. better off; just as well off as before the payment.
C. better off; better off.
D. worse off; just as well off as before the payment.

44. Now suppose that the rules governing the room are that smoking is allowed unless everyone in the room agrees to prohibit it. In that case,

A. the non-smoking occupants will pay the cigar smoker to not smoke.
B. the cigar smoker will smoke and not have to pay the other occupants for the external cost.
C. the cigar smoker will smoke, and will pay each other occupant 50 cents.
D. the parties may or may not be able to reach a negotiated agreement depending on the bargaining strength of each.

45. The Coase Theorem would predict that if the property right to smoke belongs to the cigar smoker, then there _____ smoking in the room. If the property right to clean indoor air belongs to the room occupants, then there _____ smoking in the room.

A. will be; will be
B. will be; will not be
C. will not be; will not be
D. will not be; will be

46. Declaring the card room a non-smoking area with no opportunity to negotiate would

A. decrease total economic surplus.
B. increase total economic surplus.
C. leave total economic surplus unchanged, but redistribute benefits.
D. efficiently solve the externality problem.

47. Generally the Coase Theorem implies that the initial allocation of a property right

A. determines all aspects of the final outcome of the negotiated agreement.
B. does not determine which person will be entitled to engage in the externality generating activity, but does determine which person will receive compensation.
C. determines which person will be entitled to engage in the externality generating activity, but does not affect which person will receive compensation.
D. must be assigned to the person with the greatest costs.

Ashraf and Shihab are considering living alone or being roommates and splitting the rent for the next twelve months. A one bedroom, one bath apartment is $500 per month while a two bedroom, one bath apartment is $800. The one difficulty they have is that Shihab snores very loudly. Ashraf estimates the cost of poor sleep due to Shihab's snoring at $150 per month. Shihab could obtain a snore-eliminating device for $50 per month.

48. The least costly solution to the externality present in this situation is for

A. Ashraf to endure Shihab's snoring.
B. both to live alone.
C. Shihab to eliminate his snoring.
D. Shihab to pay Ashraf for his discomfort.

49. The actual monthly gain in surplus to Ashraf and Shihab from living together after addressing the snoring problems in the least costly way is

A. $200.
B. $150.
C. $100.
D. $50.

50. Ashraf would be willing to pay _____ per month to eliminate Shihab's snoring.

A. exactly $50

B. no more than $100

C. up to $300

D. nothing

Suppose Erie Textiles can dispose of its waste "for free" by dumping it into a nearby river. While the firm benefits from dumping waste into the river, the waste reduces the fish and bird reproduction. This causes damage to local fishermen and bird watchers. At a cost, Erie Textiles can filter out the toxins, in which case local fishermen and bird watchers will not suffer any damage. The relevant gains (in thousands of dollars) and losses for the three parties are listed below.

	With Filter	Without
Gains to Erie	$200	$400
Fishermen	$180	$50
Bird Watchers	$130	$25

51. When Erie Textiles operates without a filter, the total daily gain (in thousands of dollars) by all three parties is _____.

A. $985

B. $325

C. $510

D. $475

52. When Erie Textiles operates with a filter, the total daily gain (in thousand of dollars) by all three parties is _____.

A. $985
B. $600
C. $510
D. $475

53. The daily cost (in thousands of dollars) of the filter to Erie Textiles is _____, and the daily net benefit (in thousands of dollars) of the filter to the fishermen and bird watchers is _____.

A. $400; $310
B. $310; $200
C. $200; $75
D. $200; $235

54. If Erie Textiles does not install the filter there will be a net social _____ of _____ (in thousands of dollars).

A. loss; $35
B. gain; $75
C. loss; $110
D. gain; $200

55. Local fishermen and bird watchers would be willing to compensate Erie Textiles _____ for operating with a filter.

A. up to $310 thousand dollars
B. no more than $235 thousand dollars
C. no more than $75 thousand dollars
D. nothing

56. If all three parties can communicate and negotiate with each other at no cost, will Erie Textiles use a filter?

A. No, because it makes $200 less in profit with the filter.
B. Yes, because the benefit it would receive from being able to advertise that it acts in an environmentally responsible way exceeds the cost of using a filter.
C. No, because use of a filter would result in smaller total economic surplus.
D. Yes, because fishermen and bird watchers are willing to pay enough to Erie Textiles to offset the cost of using a filter.

57. Suppose that Erie Textiles can only negotiate with one of the affected groups. Will Erie operate with a filter?

A. Yes, if they negotiate with the Bird Watchers, but not if they negotiate with the Fishermen.
B. No, regardless of which group they negotiate with.
C. Yes, if they negotiate with the Fishermen, but not if they negotiate with the Bird Watchers.
D. Yes, regardless of which group they negotiate with.

Suppose that the government has proposed strict controls on the amount of sulfur diesel fuel contains. These controls were designed to fully offset the cost of pollution generated by diesel fuel vehicles. The effect of the regulation is estimated to increase the equilibrium price of a gallon of diesel fuel by 10 cents.

58. Assuming that the supply of diesel fuel has a positive slope and demand has a negative slope one can infer that the government determined that

A. the external benefit of using diesel fuel is less than 10 cents.
B. the external cost of using diesel fuel is greater than 10 cents.
C. the external cost of using diesel fuel is less than 10 cents.
D. the external cost of using diesel fuel is equal to 10 cents.

59. Assuming that the supply of diesel fuel has a positive slope and demand has a negative slope, the quantity of diesel fuel sold after imposition of the regulation will

A. remain the same.
B. increase.
C. decrease.
D. decrease only if diesel fuel is a normal good.

60. Suppose that demand for diesel fuel is perfectly inelastic and supply has a positive slope. The effect of the regulation will _____ than if demand were not perfectly inelastic.

A. increase price and quantity by more
B. Increase price by less and reduce quantity by more
C. decrease price and quantity by more
D. increase price by more and reduce quantity by less

61. From the perspective of an externality, most communities have zoning laws to

A. control external benefits.
B. control external costs.
C. encourage positive externalities.
D. raise government revenues.

62. Which one of the following government actions is intended to generate positive externalities?

A. Free speech laws
B. Speed limits on the highways
C. Requiring autos to meet minimum emissions regulations
D. Subsidies for planting trees on hillsides

63. The most efficient distribution of pollution abatement among polluters is

A. a geographically equal abatement.
B. a fixed percent reduction for all.
C. for large reductions from the largest polluters.
D. when the marginal cost of abatement is the same across all polluters.

64. If the marginal costs of pollution abatement are different across firms, then regulations that require fixed percentage reductions in pollution will be

A. efficient.
B. inefficient
C. ineffective.
D. fair to all polluters.

65. For a fixed percent reduction in pollution emissions to be economically efficient, it would have to be the case that

A. the marginal cost of pollution control is the same across all firms.

B. enforcement is vigorous.

C. all firms be the same size.

D. large polluters reduce emissions by more than small polluters.

66. Assume that larger firms can reduce pollution emissions more cheaply than smaller firms. A fixed percent reduction in pollution emissions would therefore

A. penalize large and small firms equally.

B. penalize large firms more.

C. ensure the reduction in pollution was achieved at the lowest cost.

D. penalize smaller firms more.

Suppose that there are three power-generating plants, all of which generate emissions. The table summarizes the cost of emission reduction for each firm given five different levels of pollution:

Tons of smoke emitted per day	4	3	2	1	0
Total abatement cost, firm A	0	$14	$30	$50	$75
Total abatement cost, firm B	0	$20	$45	$80	$120
Total abatement cost, firm C	0	$25	$60	$100	$150

67. In the absence of either government regulation or private negotiation, total expenditure on pollution abatement will be $_____, and total pollution will be _____.

A. 0; 4 tons

B. 0; 12 tons

C. 59; 9 tons

D. 44; 8 tons

68. Suppose the government requires the three firms to reduce pollution to 2 tons of smoke per day, for a total of 6 tons. This will result in a total cost of _____.

A. $59
B. $42
C. $230
D. $135

69. It would cost Firm A ____ to reduce emissions by one ton if it currently emits 3 tons, and ___ to reduce an additional ton of emissions if it currently emits 2 tons.

A. $14; $20
B. $14; $16
C. $16; $20
D. $30; $50

70. In general, all three firms face _____ costs of abatement, suggesting that the principle of _____ applies to pollution abatement.

A. increasing marginal; low-hanging-fruit
B. excessive; cost-benefit
C. high; adverse selection
D. decreasing average; economies of scale

71. Suppose that the government imposes a tax of $20 per ton of pollution generated. If Firm A produces 2 tons of smoke, its abatement costs plus taxes will total ____, and if Firm A produces 3 tons of smoke, its abatement costs plus taxes will total ____. Firm A will be better off emitting

A. $30; $14; 3 tons than 2 tons
B. $40; $24; 3 tons than 2 tons
C. $36; $74; 2 tons than 3 tons
D. $70; $74; 2 tons than 3 tons

72. Suppose that the government imposes a tax of $21 per ton of pollution generated. Firm A will emit ____ tons; Firm B will emit ___ tons and Firm C will emit ___ tons.

A. 0; 2; 3
B. 1; 3; 4
C. 3; 4; 4
D. 1; 2; 4

73. The least costly way of lowering smoke emissions from 12 tons to 9 tons would be for

A. each firm to reduce emissions by 1 ton, emitting 3 tons each.
B. Firm A to emit 1 ton, and the other firms to emit 4 tons each.
C. Firm A to emit 2 tons, Firm B to emit 4 tons and Firm C to emit 3 tons.
D. Firm A to emit 0 tons; Firm B to emit 4.5 tons and Firm C to emit 4.5 tons.

74. What tax, in whole dollars per ton, would have to be charged to reduce smoke to 5 tons per day?

A. $21

B. $26

C. $36

D. $41

Two firms can use five different technologies to produce the same quantity of output: 1, 2, 3, 4 and 5. The first technology is the cheapest, but also the dirtiest. The fifth technology is the most expensive, but results in the lowest levels of pollution. The amount of pollution emitted by each firm and the cost of the technologies are shown in the table.

Technology	1	2	3	4	5
Emissions	10 tons	8 tons	6 tons	4 tons	2 tons
Acme's Costs	$750	$800	$1000	$1400	$2000
FirmCo's Costs	$500	$700	$1200	$2200	$4000

75. In the absence of either government regulation or private negotiation, the 2 firms will produce using technology _____ and pollution will be _____.

A. 3; 12 tons

B. 5; 4 tons

C. 2; 16 tons

D. 1; 20 tons

76. Suppose the firms are both currently using technology 1, and that the government adopts rules requiring each firm to reduce pollution by 20%. To comply, the firms will adopt technology ___ for a total cost of _____.

A. 1; $1250.

B. 2; $1500.

C. 3; $2200.

D. 4; $3600.

77. Suppose that the government imposes a tax of $150 per ton of pollution. As a result, Acme adopts technology _____, and FirmCo adopts technology_____.

A. 2; 1

B. 3; 2

C. 3; 3

D. 4; 3

78. Suppose that the government imposes a tax of $150 per ton of pollution. As a result, pollution emissions are _____ tons for a total cost of ____ .

A. 6; $4200

B. 8; $3600

C. 10; $3600

D. 14; $1700

79. The major difficulty with using a tax on pollution instead of a fixed percentage reduction regulation is

A. nonpayment of the tax.
B. it would cause prices to rise.
C. that it only works in theory.
D. establishing the optimal size of the tax.

80. Compared to a fixed percentage reduction regulation, a tax on pollution encourages

A. all firms to reduce pollution by the same percent.
B. all firms to use the same technology to reduce pollution.
C. firms that can most cheaply reduce pollution to make sizable reductions.
D. economic inefficiency.

81. In the absence of environmental protection laws, firms pollute because

A. business owners follow different norms than do environmentalists.
B. controlling emissions costs money, reducing profits.
C. business owners do not believe that pollution is a problem.
D. the cost pollution imposes on society is small relative to the cost of reducing pollution.

82. The advantage to selling pollution permits rather than using a fixed percent reduction for all firms is

A. government raises additional revenue.
B. reductions in pollution are accomplished by those firms that can do so at least cost.
C. enforcement costs are eliminated.
D. pollution is driven to zero.

83. The use of pollution permits by the government to reduce pollution is

A. theoretically interesting, but untried in the United States.
B. unworkable.
C. common in several parts of the United States.
D. common in the third world.

84. Compared to the taxing of pollution, pollution permits offer the advantage of

A. eliciting the largest reduction in pollution from those firms that can do so most cheaply.
B. raising revenues for the government.
C. allowing the public to influence the amount of pollution allowed through the purchasing of permits.
D. ensuring all firms reduce pollution by the same percentage.

Two firms can choose from five different technologies to reduce their pollution: A, B, C, D and E. The amount of pollution emitted by each technology and the cost of the technologies are shown in the table. Both firms have adopted technology A and currently emit 4 tons apiece. The government is considering two plans to reduce pollution: a 50% reduction by both firms or selling pollution permits. One permit entitles the owner to emit one ton of pollution. Without a permit, no pollution can be emitted.

	A: 4 tons	B: 3 tons	C: 2 tons	D: 1 ton	E: no pollution
Industrio	$350	$400	$500	$700	$1000
Capitalista	$225	$250	$290	$400	$600

85. A government regulation that requires both firms to reduce pollution by 50% results in process _____ being adopted and the private costs are _____.

A. A; $575

B. B; $650

C. C; $790

D. D; $1100

86. If the government decided to use permits instead of regulation, in order to reduce pollution by 50% it would need to sell _____ permits.

A. 4

B. 2

C. 3

D. 5

87. Industrio would be willing to pay up to ___ for the right to discharge 1 ton of pollution, and Capitalista would be willing to pay up to __ for the right to discharge 1 ton of pollution.

A. $50; $25
B. $1000, $600
C. $50, $50
D. $300, $200

88. Suppose a permit system has been adopted and each firm has already purchased one permit. Industrio would be willing to pay up to ___ for the right to discharge a second ton of pollution, and Capitalista would be willing to pay up to __ for the right to discharge a second ton of pollution.

A. $200; $300
B. $200; $110
C. $100; $40
D. $500; $290

89. Suppose the government decides to sell 6 permits allowing a total of 6 tons of pollution. The government starts the bidding with an opening price of $30. What happens next?

A. A total of five permits will be demanded, forcing the government to lower the price.
B. Industrio will purchase all available permits at $30.
C. Industrio will demand 3 permits and Capitalista will demand 3 permits.
D. A total of seven permits will be demanded, forcing the government to raise the price.

90. The ultimate equilibrium price of six permits is _____ with Industrio buying _____ and Capitalista buying _____.

A. $100; 3; 3

B. $110; 2; 4

C. $50; 4; 2

D. $300; 3; 3

91. Suppose the government decides to sell 6 permits and an environmental group is determined to only allow 5 tons of pollution to be emitted. To accomplish its goal, the environmental group should bid _____ for the permit.

A. $301

B. $201

C. $111

D. $51

Suppose that a government agency is trying to decide between two pollution reduction policy options. Under the permit option, 100 pollution permits would be sold, each allowing emission of one unit of pollution. Firms would be forced to shut down if they produced any units of pollution for which they did not hold a permit. Under the pollution tax option, firms would be taxed $250 for each unit of pollution produced. The regulated firms all currently pollute and face varying costs of pollution reduction, though all face increasing marginal costs of pollution reduction.

92. Suppose the permit policy is adopted. A firm will wish to purchase its first permit if the price of that permit is less than or equal to

A. the cost of reducing its existing pollution by one unit.
B. the lowest cost of eliminating one unit of pollution.
C. the marginal cost of eliminating its last unit of pollution and operating completely pollution free.
D. the average cost of eliminating one unit of pollution.

93. Suppose the tax policy is adopted. A firm will be willing to pay the tax if $250 is less than or equal to

A. the cost of reducing its existing pollution by one unit.
B. its marginal revenue.
C. its average total cost of production.
D. the average cost of eliminating one unit of pollution.

94. Because firms face increasing marginal costs to reduce pollution, demand for pollution permits will be

A. upward sloping.
B. downward sloping.
C. perfectly inelastic.
D. perfectly elastic.

95. The two policies being considered will result in the same amount of pollution reduction

A. never.
B. always.
C. only if the equilibrium price in the pollution permit market is $250.
D. only if the regulating agency opens the bidding for permits at $250.

96. Suppose the regulators chose the permit policy. What might explain that decision?

A. Permit auctions raise more revenue than do taxes.
B. The permit policy allows regulators to achieve reduction goals without having detailed knowledge about firms' abatement costs.
C. The permit policy will reduce pollution by more than would the tax policy.
D. Firms prefer the permit policy because it allows them to choose the least-cost reduction technology.

97. Pollution permit policies achieve an _____ outcome because

A. inefficient; wealthier firms can dominate the market.
B. efficient; the supply of permits is elastic.
C. inefficient; the supply of permits is set by the government, and so is inelastic.
D. efficient; firms have an incentive to minimize costs.

98. Suppose that you are an economic researcher, and you have access to detailed information about all of the firms in a given geographic area. You would conclude that the pollution reduction policy in that area is efficient if you observe that

A. all firms produce approximately the same amount of pollution.
B. the cleanest firms are also the most profitable.
C. all firms have approximately equal marginal costs of reduction at current emission levels.
D. all firms currently use the same pollution reduction technology.

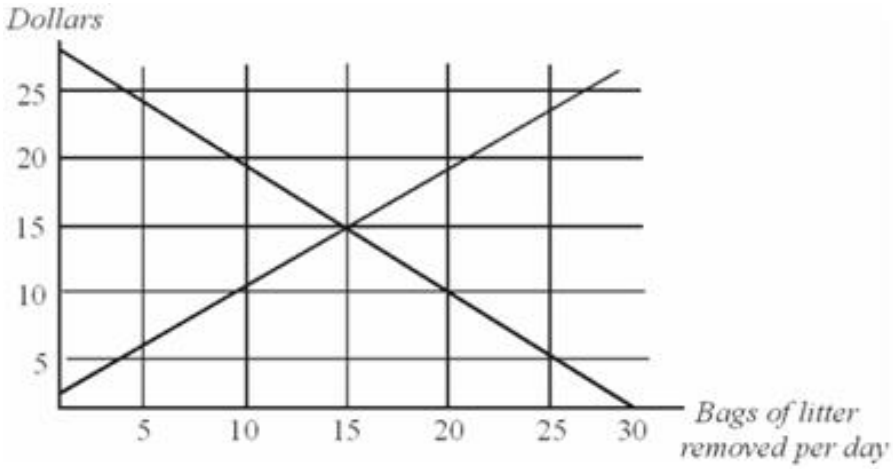
99. The optimal quantity of a negative externality is zero if

A. it kills many people.
B. it is costly to negotiate a Coasean solution.
C. people vote against it in a democratic election.
D. the marginal cost of reducing it is zero.

100. If the marginal cost of reducing pollution is positive,

A. it should be reduced as much as technically feasible.
B. the marginal benefit is nearly zero.
C. the optimal amount is zero.
D. the optimal amount is greater than zero.

This graph shows the marginal costs and marginal benefits associated with roadside litter clean up. Assume that the marginal cost and marginal benefit curves slope in the usual directions.



101. The socially optimal number of bags of litter removed from the roadside is

A. 10.

B. 15.

C. 20.

D. 30.

102. From the graph, one can infer that

A. the benefits of picking up the 10th bag of litter exceed the costs.

B. the costs of picking up the 10th bag exceed the benefits.

C. the benefits of picking up the 20th bag exceed the costs.

D. the total benefit of having 30 bags removed is less than the total benefit of having 25 bags removed.

103.The marginal cost of removing litter _____ due to the principle of _____.

A. decreases; gains from specialization

B. increases; the Coase Theorem

C. increases; low-hanging fruit

D. decreases; diminishing returns to inputs

104.Picking up the 20th bag of litter would

A. be efficient.

B. increase total economic surplus.

C. create deadweight loss.

D. be socially efficient, but would not be consistent with following self-interest motives.

105.According to this graph, the marginal benefit of litter removal is maximized when the ___ bag is removed.

A. first

B. 10th

C. 15th

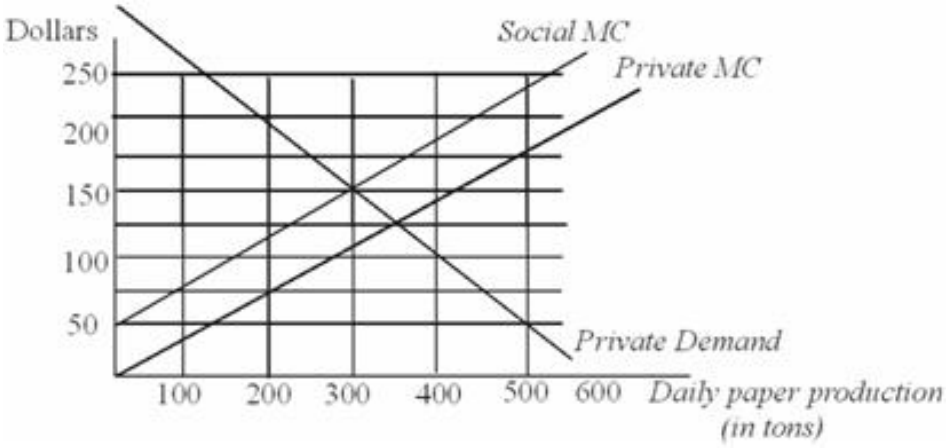
D. 30th

106. Suppose the state highway department has picked up 15 bags of litter. Protesters have staged a demonstration demanding that the highway department return to pick up the remaining litter. The reason that the protesters have a _____ claim is that:

A. legitimate; litter generates a negative externality.
B. faulty; the additional resources needed to remove more litter could be better used elsewhere.
C. faulty; the government is not responsible for taking care of private property.
D. legitimate; the government has a responsibility to take action when private market incentives do not yield the socially optimal result.

107. A state initiative requiring towns to spend at least $20 per day on litter removal would be _____ because _____.

A. efficient; any and all reductions in litter are justified.
B. inefficient; the marginal costs exceed the marginal benefits.
C. inefficient; $20 is insufficient to remove all of the litter.
D. efficient; it solves the inefficiency in the market created by the negative externality.



108. Refer to the figure above. From this graph, you can infer that paper production

A. generates no externalities at quantities less than 300 tons per day.

B. generates negative externalities equal to approximately $50 per ton per day.

C. generates negative externalities equal to approximately $25 per ton per day.

D. should be prohibited.

109. Refer to the figure above. This graph suggests that the private market provides incentives to

A. eliminate the externalities generated by paper production.

B. under-produce paper relative to the social optimum.

C. over-produce paper relative to the social optimum.

D. over-price paper relative to the social optimum.

110. Refer to the figure above. The invisible hand _____ allocate resources efficiently in the market because

A. does; demand and supply cross at the market equilibrium.

B. does not; some costs of production are not included in private marginal costs.

C. does; firms are motivated to maximize profit.

D. does not; consumers are not willing to pay the external costs of production.

111. Refer to the figure above. When the external cost is included, the efficient equilibrium price is ____ and the socially optimal quantity is _____.

A. $125; 350
B. $125; 225
C. $150; 400
D. $150; 300

112. Refer to the figure above. Assume that a Coase Theorem solution (private negotiation) is impractical for solving the externality problem illustrated. The efficient equilibrium could be achieved by

A. banning production of the good.
B. compensating those injured by the externality.
C. taxing the good by an amount equal to the external cost.
D. subsidizing the good by an amount equal to the external benefit.

113. Refer to the figure above. If the firm were forced to pay the external cost, the firm would

A. increase the price of paper by the full amount of the external cost.
B. be unable to increase the price of paper, and so would bear the entire burden of the increased cost.
C. produce more paper than it does at the private market equilibrium
D. share the burden of the higher cost with paper consumers.

114. Refer to the figure above. Because production of paper imposes costs on society, the optimal level of production is

A. zero.
B. less than the equilibrium quantity of 300, but more than zero.
C. 300.
D. more than 300 but less than the equilibrium quantity of 350.

115. The tragedy of the commons refers to the

A. overuse of resources that have no price.
B. overuse of resources that have no cost.
C. under production of external benefits.
D. pollution of our natural resources.

116. Which of the following would be subject to the tragedy of the commons?

A. Restrooms in a restaurant
B. Timber on public lands
C. Cattle on a ranch
D. Apples in Asal's apple farm

117. Since the cost of obtaining more of any resource is _____, viewing any resource's price as zero leads to _____.

A. positive; underutilization
B. negative; overutilization
C. positive; a surplus
D. positive; overutilization

118. The tragedy of the commons is an example of

A. efficiency gained through operation of the invisible hand.
B. a smart for one, dumb for all situation.
C. increasing marginal costs.
D. comparative advantage and specialization

119. The reason buffalo were driven to extinction while at the same time cattle were thriving is that

A. cattle were owned by ranchers whereas buffalo were wild.
B. demand for buffalo meat was low, discouraging production.
C. Western expansion required killing the Indian's main resource.
D. the price of buffalo hides was very low.

Early settlers in the town of Dry Valley drilled wells to pump as much water as they wanted from the single aquifer beneath the town. (An aquifer is an underground body of water.) As more people settled in Dry Valley, the aquifer level fell and new wells had to be drilled deeper at higher cost.

120. The aquifer beneath Dry Valley is

A. an external cost.
B. private property.
C. a commons.
D. an external benefit.

121. Residents of Dry Valley have a private incentive to ____ water because _____

A. over use; external costs aren't considered.
B. under use; it is a scarce resource.
C. over use; it is a scarce resource.
D. under use; it is characterized by increasing marginal costs.

122. The town council has proposed putting a meter on each household's pump, and charging residents for each gallon of water used. This would

A. not change water use.
B. price an un-priced resource, increasing incentives to avoid wasting water.
C. convert private property to public property.
D. reduce total economic surplus.

123.In Dry Valley, the supply of water is

A. perfectly inelastic.
B. perfectly elastic.
C. upward sloping.
D. downward sloping.

124.A property rights solution to the problem of poaching of elephants for their ivory would be to

A. assign the property rights of the elephant herds to specific tribes.
B. increase enforcement efforts against poachers.
C. ban the importation of ivory.
D. tax ivory products.

125.The positive correlation between economic success and well-defined private property rights is

A. a statistical anomaly, and not a causal relationship.
B. an example of capitalist greed and exploitation.
C. due to the observation that, when resources are owned, they are not treated as if they have a marginal cost of zero.
D. only evident in the Western world.

126.According to the textbook, limits on private property rights, e.g., zoning laws, are

A. market interventions that reduce the size of the economic pie.
B. generally unnecessary, as people have an inherent incentive to use private property wisely.
C. an attempt to protect or enlarge the total economic surplus.
D. designed to help one group and harm another.

127.A resource that has common property rights is one that

A. is subject to common law.

B. benefits everyone equally.

C. one that has no marginal benefit.

D. treated as though it has a price of zero.

128.Which of the following is most likely to be used efficiently?

A. A resource that has private property rights

B. A resource that benefits everyone

C. Government owned resources

D. Endangered species

129.In most industrialized countries, private property rights are

A. absolute.

B. rare.

C. subject to limitations.

D. a recent development.

The following data show the relationship between the number of drivers who leave for work at 8:00 am, their average commute times, and their marginal benefit associated with the commute times.

Number of drivers that leave at 8:00am	Average commute time to downtown	Marginal Benefit
100	30 minutes	$10
200	65 minutes	$8
300	110 minutes	$4
400	170 minutes	$3
500	260 minutes	$1

130. If commuters view the highway as having a zero price, one can predict that _____ drivers will leave for downtown at 8:00 am.

A. 500

B. 400

C. 300

D. 200

131. Suppose a toll is imposed in the following way: leaving between 8 a.m. and 9 a.m. costs $5 per driver, after 9 a.m. the toll is zero. One can predict that _____ drivers would be on the road between 8:00 and 9:00 a.m.

A. 100

B. 200

C. 300

D. 400

132. Suppose a toll is imposed in the following way: leaving between 8 a.m. and 9 a.m. costs $5 per driver, after 9 a.m. the toll is zero. The toll _____ because _____.

A. reduces efficiency; citizens are paying for the highway through taxes and through the toll
B. improves efficiency; government now has more tax revenue
C. reduces efficiency; drivers don't change their behavior because $5 is less than the benefit of driving
D. improves efficiency; the highway is no longer treated as having a price of zero

133. An argument for imposition of a toll rather than using a Coase Theorem negotiated solution is that

A. this is not an externality problem.
B. government needs additional revenues.
C. the external cost is not well defined.
D. private negotiations among 500 drivers is impractical.

134. The reason drivers would prefer building new roads to a $5 toll to reduce commute times is because

A. building roads is the only cost-effective solution.
B. they know a toll would not alter commuting behavior.
C. a tax solves the commitment problem.
D. the cost of new roads falls on all taxpayers; the toll only falls on those who use the existing road.

A village has five residents, each of whom has accumulated savings of $50. Each villager can use the money to buy a government bond that pays 10% interest per year or to buy a year-old goat, send it onto the commons to graze, and sell it after one year. The price of the goat that the villager will get at the end of the year depends on the amount of weight it gains while grazing on the commons, which in turn depends on the number of goats sent onto the commons, as shown in table below.

Number of goats on the commons	Price per 2-year-old goat ($)	Income per goat ($/year)
1	80	30
2	75	25
3	70	20
4	65	15
5	55	5

135. The villager will buy a year-old goat if it will command a price of at least _____ as a 2-year-old.

A. $55

B. $75

C. $70

D. $65

136. How many goats will villagers send onto the commons?

A. 2

B. 3

C. 4

D. 5

137. What will be the total village income, if everyone makes the decision that gives him or her the maximum benefit?

A. $5

B. $125

C. $75

D. $25

138. Suppose a village elder decides the total number of goats and bonds with the goal of maximizing total village income. The elder will buy _____ government bond(s) and send ____ goat(s) onto the commons.

A. 0; 5

B. 1; 4

C. 2; 3

D. 3; 2

139. Suppose a village elder decides the total number of goats and bonds with the goal of maximizing total village income. The village income will be _____.

A. $250

B. $125

C. $70

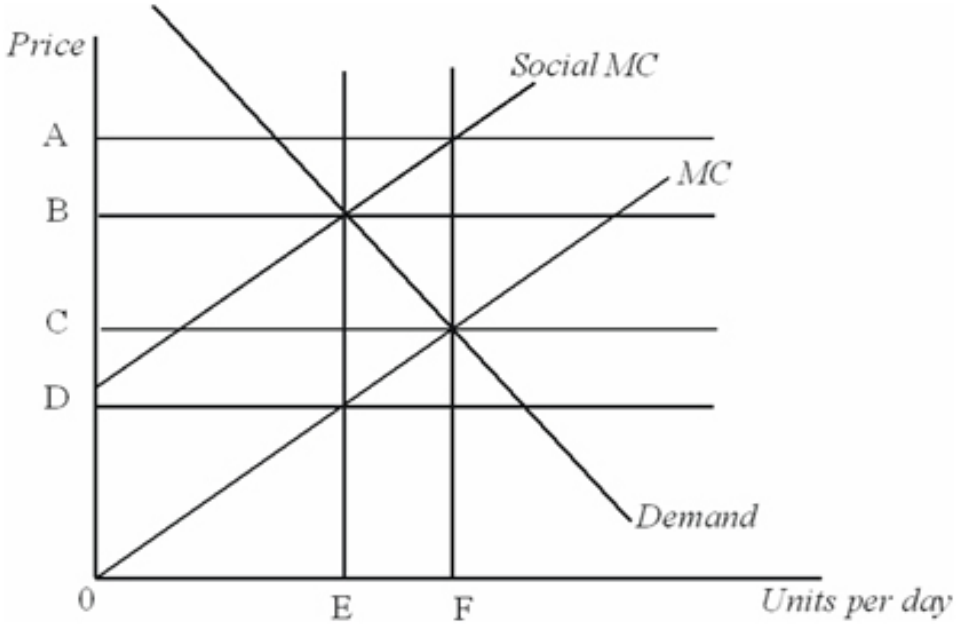
D. $15

140. In order to achieve a socially optimal level of output, activities that generate negative externalities should be

A. banned.
B. subsidized.
C. taxed.
D. bought out by the government.

141. In order to achieve a socially optimal level of output, production that generates positive externalities should be

A. required.
B. subsidized.
C. conducted by the government.
D. deregulated.



142.Refer to the figure above. This graph describes a production process that

A. generates positive externalities.

B. is used by a perfectly competitive industry.

C. generates negative externalities.

D. has been negotiated using the Coase Theorem approach.

143.Refer to the figure above. Private market incentives would result in this good being _____ by_____.

A. overpriced; BD

B. underpriced; BD

C. overpriced; BC

D. underpriced; BC

144. Refer to the figure above. The deadweight loss associated with private incentives in this market is a triangle with area equal to _____.

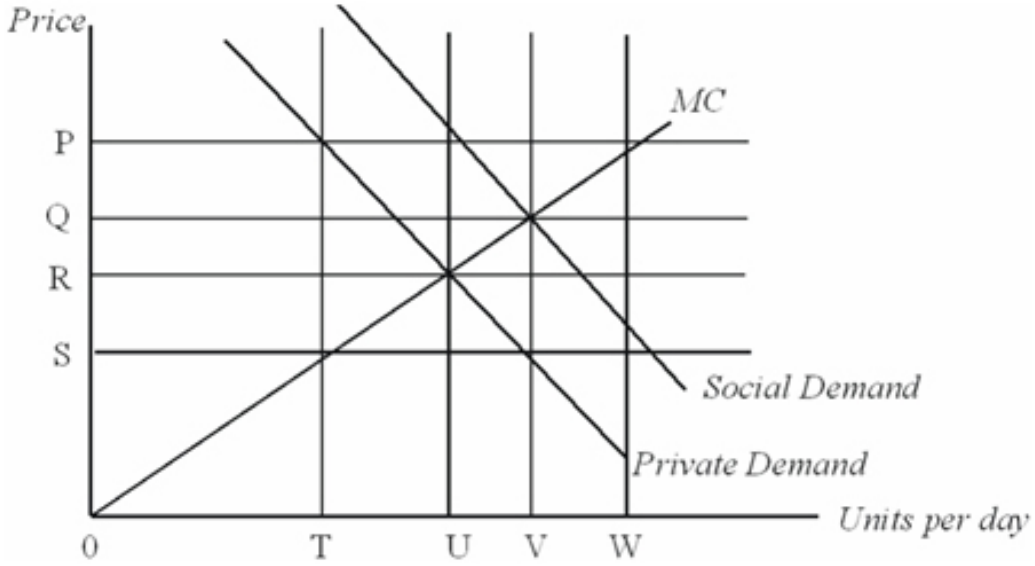
A. ½ EF times BC
B. ½ 0C times 0E
C. ½ EF times AC
D. ½ EF times AB

145. Refer to the figure above. The social optimum in the market illustrated could be achieved by imposing a _____.

A. subsidy equal to DB
B. tax equal to DB
C. tax equal to BA
D. tax equal to BC

146. Refer to the figure above. In the graph above, the ____ needed to achieve the social optimum is ____ the resulting price change.

A. tax; equal to
B. tax; greater than
C. tax; less than
D. subsidy; equal to



147. Refer to the figure above. The socially optimal quantity in this market is _____.

A. 0T

B. 0U

C. 0V

D. TV

148. Refer to the figure above. At a price of Q,

A. firms are choosing according to private incentives, but ignoring social benefits.

B. firms are passing the entire cost of the externality to their customers.

C. the market will be in equilibrium at the socially optimal quantity of the good without government interference.

D. there will be excess supply in this market if there is no government interference.

149. Refer to the figure above. Private incentives in this market generate deadweight loss equal to _____.

A. ½ PS times TV
B. ½ PS times TU
C. ½ PR times UV
D. ½ PR times TU

150. Refer to the figure above. A _____ equal to _____ would achieve the social optimum in this market.

A. tax; QS
B. subsidy; RS
C. tax; RS
D. subsidy; QS

151. Refer to the figure above. A corrective _____ would result in consumers paying a price of ____ and producers receiving a price of _____.

A. tax; Q; Q
B. subsidy; R; P
C. subsidy; S; Q
D. tax; Q; S

Suppose that lunch in your dorm is an all-you-can-eat buffet, served from 11 a.m. until 1 p.m. By noon the buffet is picked over, and by 12:30 there are few popular items left. The garbage bins, though, are full of food.

152.The buffet in your dorm is an example of

A. a Coase-like solution to externalities.
B. a tragedy of the commons.
C. excess supply in the market.
D. a situation in which diminishing marginal utility does not hold.

153.Over time, you would expect that students would

A. stop eating so much at lunch because they would notice that it generates waste.
B. start distributing themselves more evenly over the lunch hours to avoid long lines.
C. come earlier and earlier for lunch in order to have a better selection from which to choose.
D. be pickier in their selections from the buffet.

154.If the cafeteria changed its policy so that students had to pay for each item chosen, students would

A. continue to make the same selections as before, but waste less.
B. select only the most expensive items in the buffet.
C. experience diminishing marginal utility for food at a faster rate.
D. make food selections to equalize the marginal utility per dollar for each item.

155. Bakr owns a beachfront lot with a small house. During seasonal storms, he refuses to leave. Afterward he applies for government assistance to rebuild and files insurance claims for damages. By doing so, Bakr is

A. pursuing life, liberty and the pursuit of happiness.
B. imposing an external cost on himself.
C. imposing an external cost on rescue workers, taxpayers, and insurance policy holders.
D. treating his property as common property.

156. When one's performance is judged relative to others' performance and not by an absolute standard,

A. players will over invest in performance enhancements.
B. players will under invest in performance enhancements.
C. the incentive to sabotage the other players is lessened.
D. a positional externality is not possible.

157. According to the textbook, if all athletes took performance-enhancing drugs, the rank ordering of athletes (1^{st}, 2^{nd}, 3^{rd}, etc) would be unchanged. This assumes that

A. performance-enhancing drugs have no effect on performance.
B. performance-enhancing drugs improve the performance of all athletes by the same amount.
C. performance-enhancing drug usage is widespread.
D. performance-enhancing drugs are legal.

158.A positional externality

A. can only occur in sports.
B. arises in situations where absolute performance is judged.
C. results in under investment in performance enhancement.
D. occurs when an increase is one player's performance reduces the expected reward of the other players.

Suppose that in most car accidents between cars of unequal size, the smaller car sustains the most damage and its occupants suffer the most injury. In answering the following questions, assume that, on average, smaller cars generate less air pollution and that every person in the economy drives at least one car.

159.Relative to driving an average car, driving a larger-than-average car generates

A. an external cost.
B. an external benefit.
C. neither an external benefit nor an external cost.
D. a prisoners dilemma.

160.As the average size of cars increases, the incentive to buy a smaller car

A. also increases due to cost savings at the fuel pump.
B. also increases to offset the external cost of air pollution.
C. decreases because of the increased risk of injury in an accident.
D. remains the same because car purchases depend on individual preferences.

161. Suppose the size of all cars increased by 25%. Car accidents between two cars would cause _____ and air pollution would _____.

A. less injury; increase
B. greater injury; increase
C. neither greater nor less injury; remain the same
D. neither greater nor less injury; increase

162. Which of the following investments is an example of a positional arms race?

A. Watching your friend training for a FIFA football game.
B. Renting movies for the weekend.
C. Studying hard for the economics test if the professor grades on a curve.
D. Playing golf for fun.

163. Suppose that voters in Party A are both wealthier and more likely to make campaign contributions than Party B voters. One could then predict that

A. Party A will be more likely to favor spending limits.
B. both parties will favor campaign spending limits equally.
C. Party B will be more likely to favor campaign spending limits.
D. both parties will oppose campaign spending limits.

164. Assume that the town of Pleasantville has two local TV stations. If one of them invests in the newest weather forecasting technology, one can predict that

A. the other station will continue to use its current technology.
B. to maintain its relative standing, the other station will upgrade its radar technology.
C. to maintain its absolute standing, the other station will upgrade its radar technology.
D. the quality of forecasts will remain unchanged.

165. From the individual's standpoint, participating in a positional arms race is a _____ from society's point of view, it is _____.

A. dominant strategy; efficient
B. tit-for-tat strategy; efficient
C. dominant strategy; inefficient
D. tit-for-tat strategy; inefficient

166. According to the textbook, social norms can be viewed as

A. a way to establish property rights.
B. a tool of the government.
C. an informal solution to a positional arms race.
D. a useful way to organize marketing campaigns.

167. Assume that to be labeled a nerd (someone who studies a lot and has high grades) in high school or college is a social negative. According to the textbook,

A. this is a cruel and unfair stereotype.
B. those who study hard would be better off it this negative stereotype was eliminated.
C. the negative stereotype serves to discourage some students from studying hard thus increasing the payoff to those who do.
D. the negative stereotype serves to comfort those who don't study and make poor grades.

168. Unkind jokes and sarcastic remarks about whether someone has had Botox injections are

A. a sign of immaturity.
B. inefficient.
C. an attempt to limit the amount of cosmetic procedures by social norms.
D. an example of a positional arms race.

169. The inefficiency induced by all positional arms races is that

A. the rankings don't change.
B. the increase in performance diminishes on the margin.
C. the increase in performance is negative.
D. spending on performance enhancements escalates without end.

170.Which of the following is an example of a positional arms control agreement?

A. Campaign spending limits

B. Zoning limits on building height in big cities

C. Regulating acts of free speech that cause more harm than good

D. Speed limits

The following payoff matrix shows the outcomes for the US and the USSR from relying on conventional weapons or atomic weapons. The percentages refer to the fraction of the population that would die if a war occurred under the two weapons strategies. Assume the payoff matrix is for 1945, shortly after the US had demonstrated the destructive power of the atomic bomb in World War II, i.e., the example begins in the upper right cell where USA has atomic weapons and the USSR has only conventional weapons.

		USSR	
		Atomic Weapons	Conventional
USA	Atomic Weapons	In the USA, 60% would die; In the USSR, 60% would die	In the USA 5% would die; In the USSR, 90% would die
	Conventional	In the USA, 90% would die; In the USSR, 5% would die	In the USA 10% would die; In the USSR, 10% would die.

171.The Nash equilibrium in this situation is for

A. both countries to have conventional weapons.

B. both countries to have atomic weapons.

C. the USSR to have atomic weapons and the USA to have conventional weapons.

D. the USA to have atomic weapons and the USSR to have conventional weapons.

172. After both the USA and USSR have atomic weapons, the dominant strategy for the US is _____ and for the USSR, the dominant strategy is _____.

A. atomic weapons; conventional weapons
B. conventional weapons; atomic weapons
C. conventional weapons; conventional weapons
D. atomic weapons; atomic weapons

173. As a result of the positional externality in this game,

A. both countries are worse off.
B. the United States is better off but the USSR is worse off.
C. the United States is worse off and the USSR is better off.
D. both countries are better off.

174. When the United States demonstrated its nuclear capability in the 1950's, the predictable result was

A. the arms race ended.
B. the USSR responded by developing chemical weapons.
C. the USSR developed its nuclear capability.
D. the United States decided to refrain from development.

175. Suppose that a diplomat representing the USSR made the following statement to a diplomat representing the United States: "We will disarm all of our atomic weapons and not develop any new ones." That statement is

A. a credible promise because it would convince the United States to disarm as well.
B. a credible promise because it contains a commitment device.
C. a non-credible promise because mutual disarmament yields a worse outcome for both countries.
D. a non-credible promise because of the commitment problem.

Shayma and Farah are neighbors. They work at the same firm and hold the same title. Shayma finds that when Farah's consumption rises, Shayma feels worse off. Farah feels the same way towards Shayma's consumption.

176. For both Shayma and Farah,

A. their own consumption is a positional externality.
B. consumption in general is a positional externality.
C. consumption in general has external benefits.
D. each other's consumption generates a positional externality.

177. Suppose Farah buys a new Lexus (a luxury car) and shortly thereafter Shayma buys a new Mercedes (also a luxury car). Shayma and Farah seem to be

A. making independent rational consumption decisions.
B. unaware of the other's actions.
C. involved in a positional arms race.
D. imposing external benefits on each other.

178. Suppose the firm that employs both Farah and Shayma begins to offer one hour of overtime. It is likely that

A. Farah will work more but not Shayma.
B. Shayma will work more but not Farah.
C. neither Farah nor Shayma will work more.
D. both Farah and Shayma will work more.

179. Suppose that after offering the first hour of overtime, the firm that employs Farah and Shayma begins to offer a second hour of overtime. One can predict that

A. Farah will work even more but not Shayma.
B. Shayma will work even more but not Farah.
C. neither Farah nor Shayma will change their work hours.
D. both Farah and Shayma will work even more.

180. An effective mechanism to avoid working all day and all night as their employer offers more and more overtime, Farah and Shayma could

A. stop independently.
B. not let the other's consumption affect them.
C. lobby for limits on the maximum number of hours in a work week.
D. agree between them to stop this silly game.

Your economics professor has announced the following grading policy: For each exam, the highest score in the class will be entered as a 100%; all other scores will be entered as the percent of that top score. For example, if the highest test score is a 50 out of 100, it will be counted as a perfect paper, and exams with a score of 40 out of 100 will be entered as an 80%. The final grade for the course will be determined using these adjusted percentages, with 90% and above an A, 80% and above a B, 70% and above a C and below 70% not passing.

181. This grading scheme

A. uses an absolute standard.
B. uses a relative standard.
C. is too confusing to adequately motivate students.
D. is designed to discourage competitive over-studying.

182. The students all get together and decide not to study for the next exam because if nobody does extremely well, they will all do okay. This plan

A. requires everyone to follow their dominant strategy.
B. will be stable because there are no incentives to deviate.
C. will be unstable because there is an incentive to break the agreement.
D. is a commitment device, and thus stable.

183. You would expect that, as the semester progressed, students in this class who cared primarily about good grades would

A. study less and less to maintain low standards and still earn high grades.
B. forget about the grading scheme, and learn to study for the sake of learning.
C. engage in a positional arms race, studying more and more.
D. maintain a stable agreement to not study for exams.

Chapter 10 Testbank Key

1. When part of the cost of an activity falls on people not pursuing the activity, it is call a(n)

A. external benefit.

B. prisoner's dilemma.

C. negative externality.

D. positive externality.

AACSB: Analytical Skills

Blooms: Knowledge

Frank - Chapter 10 #1

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits

2. Which of the following is an example of an activity with an external cost?

A. Raising honeybees where neighbors on all sides grow apples

B. Keeping the front yard clean

C. Speeding on the highway

D. Having to buy batteries for the new remote that came with a TV

AACSB: Analytical Skills

Blooms: Knowledge

Frank - Chapter 10 #2

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits

3. When some fraction of the benefit of an activity is received by people not participating in the activity, it is called a(n)

A. winner's curse.

B. positive externality.

C. external cost.

D. efficient allocation.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #3
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

4. For most people, baking cinnamon rolls generates _____ externality, and burning tires generates _____ externality.

A. a positive; a negative.

B. a negative; a positive.

C. a positive, no.

D. no; a negative.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #4
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

5. Which of the following is not an example of an activity with external benefits?

A. Eating a sandwich in the dining hall

B. Planting flowers in the front yard

C. Staying home from class when you have the flu

D. Having your smoking car repaired

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #5
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

6. The existence of a negative externality will result in

A. a less than optimal level of production.

B. a greater than optimal level of production.

C. prices that are artificially high.

D. elimination of deadweight loss.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #6
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

7. Laws that regulate the behavior of firms and of individuals are often enacted in order to

A. eliminate all negative externalities.

B. convert private benefits into positive externalities.

C. correct resource misallocation due to externalities.

D. redistribute income more equitably.

AACSB: Analytical Skills

Blooms: Understanding
Frank - Chapter 10 #7
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

8. If the market equilibrium quantity is greater than the socially optimal quantity, one can infer that

A. the private supply curve for the activity is to the left of the socially optimal supply curve.
B. the private demand curve for the activity is below the socially optimal demand.
C. the production of this good has a positive externality.
D. the production of this good has a negative externality.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #8
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

9. If the market equilibrium quantity is less than the socially optimal quantity, one can infer that

A. the private supply curve for the activity is below the socially optimal supply curve.
B. the private demand curve for the activity is above the socially optimal demand.
C. the production of this good has a positive externality.
D. the production of this good has a negative externality.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #9
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

10. If the equilibrium quantity is equal to the socially optimal quantity, one can infer that

A. the supply curve for the activity is below the socially optimal supply curve.

B. the production of this good has no externality.

C. the production of this good has a positive externality.

D. the production of this good has a negative externality.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #10
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

11. In the case of either a positive or negative externality, it will always be true that, relative to the social optimum,

A. the market price will be too low.

B. the market price will be too high.

C. the market price will send an inaccurate signal of true cost or benefit.

D. the quantity provided by the market will be too large.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #11
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

12. Suppose coal mining produces a negative externality in the form of polluted streams. One can deduce that the unregulated

A. price of coal is too high.
B. quantity of coal produced is too small.
C. quantity of coal produced is too high.
D. supply curve lies to the left of the regulated supply curve.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #12
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

13. In the case of _____, the invisible hand fails to generate the efficient outcome because buyers and sellers only take their self-interests into account.

A. either an external cost or an external benefit.
B. an external cost.
C. an external benefit.
D. neither an external cost nor an external benefit.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #13
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

14. If the external cost of an activity is added to the private costs, then the

A. supply curve shifts right.

B. quantity supplied rises.

C. supply curve shifts left.

D. demand curve shifts right.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #14
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

15. If the external benefit of an activity is added to the private benefits, then the

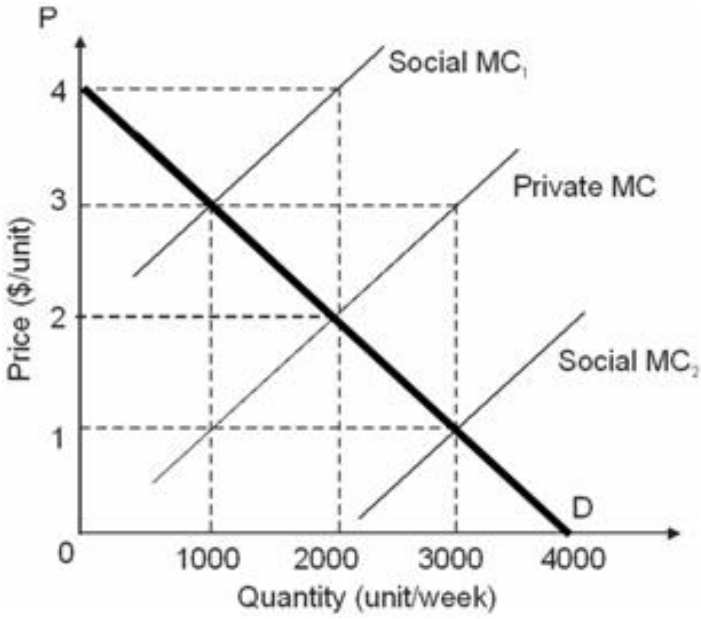
A. demand curve shifts left.

B. quantity demanded rises.

C. demand curve shifts right.

D. supply curve shifts right.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #15
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits



Frank - Chapter 10

16. Refer to the figure above. When the market has no external costs or benefits, the resulting equilibrium quantity is ____ and price is _____.

A. 0; $4

B. 1000; $3

C. 2000; $2

D. 3000; $1

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #16

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits

17. Refer to the figure above. Suppose that production of this good is accompanied by an external cost, the private market equilibrium quantity is ____ and the private market equilibrium price is _____.

A. 0; $4

B. 1000; $3

C. 2000; $2

D. 3000; $1

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #17

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits

18. Refer to the figure above. Suppose that production of this good is accompanied by an external cost illustrated on this graph. The private market equilibrium quantity is _____ the socially optimal quantity.

A. equal to

B. 1000 units less than

C. 1000 units more than

D. 2000 units more than

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #18

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits

19. Refer to the figure above. Suppose, production of this good is accompanied by an external cost = $2/unit, social MC equals _____.

A. private MC - $2

B. private MC + $2

C. private MC - $0

D. private demand - $2

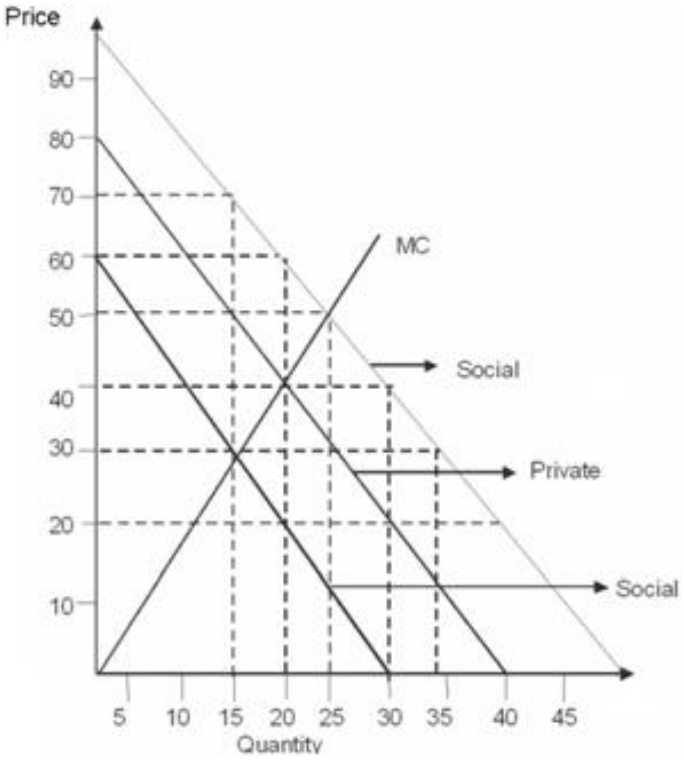
AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #19

Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

Section: External Costs and Benefits



Frank - Chapter 10

20. Refer to the figure above. When the market has no external costs or benefits, the resulting equilibrium quantity is ____ and price is _____.

A. 15; $30

B. 20; $40

C. 25; $50

D. 30; $20

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #20
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

21. Refer to the figure above. Suppose that production of this good is accompanied by an external benefit, the private market equilibrium quantity is ____ and the private market equilibrium price is _____.

A. 15; $30

B. 20; $40

C. 25; $50

D. 30; $20

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #21
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

22. Refer to the figure above. Suppose that production of this good is accompanied by an external benefit illustrated on this graph. The private market equilibrium quantity is _____ the socially optimal quantity.

A. equal to
B. 10 units less than
C. 5 units less than
D. 5 units more than

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #22
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

23. Refer to the figure above. Suppose production of this good is accompanied by an external benefit = $15/unit, social demand equals _____.

A. private demand - $15
B. private demand + $15
C. private demand + $0
D. marginal cost - $15

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #23
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

24. The presence of an external benefit that is not corrected results in

A. additional total economic surplus.

B. deadweight loss.

C. a larger economic pie to be distributed among everyone.

D. taxation.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #24
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

25. An external benefit implies that private markets will provide ____ and an external cost implies that private markets will provide _____ of the good (relative to the social optimum).

A. too much; too much

B. too little; too little

C. too much; too little

D. too little; too much

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #25
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

26. Private incentives in markets with external benefits lead to _____; private incentives in markets with external costs lead to _____.

A. maximum total economic surplus; deadweight loss

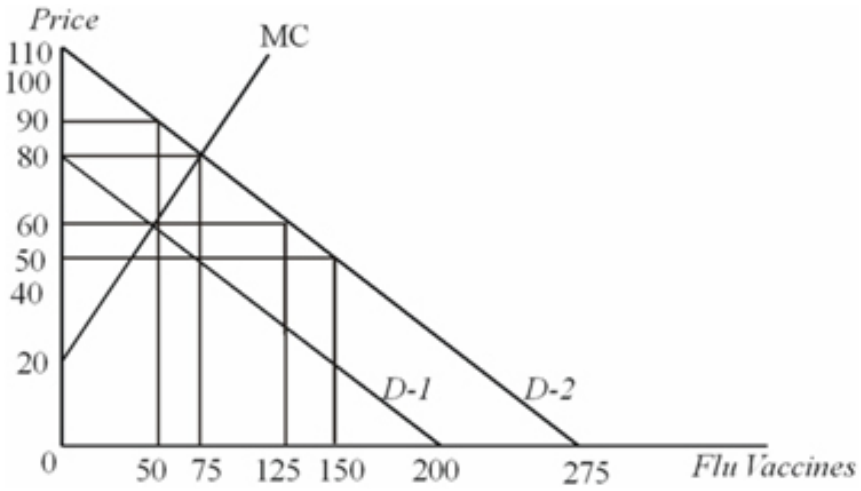
B. deadweight loss; deadweight loss

C. excess total economic surplus; efficiency

D. excess total economic surplus; deadweight loss

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #26
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

Suppose that a vaccine is developed for a highly contagious strain of flu. The likelihood that anyone will get this flu decreases as more people receive the vaccine.



Frank - Chapter 10

27. Private incentives will lead to _____ people receiving the vaccine at a cost of _____.

A. 75; $80

B. 75; $50

C. 50; $60

D. 50; $90

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Blooms: Application
Frank - Chapter 10 #27
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

28. The dollar value of the external _____ is _____.

A. benefit; $30

B. cost; $20

C. benefit; $20

D. benefit; $75

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #28
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

29. Private benefits are measured by _____ and social benefits are measured by _____.

A. D-1; MC

B. D-2; MC

C. D-1; D-2

D. D-2; D-1

AACSB: Analytical Skills

Blooms: Application
Frank - Chapter 10 #29
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

30. If the flu vaccine is provided by private markets, deadweight loss will be _____.

A. zero
B. $375
C. $500
D. $1,125

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #30
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

31. The socially optimal number of vaccines is _____.

A. 50
B. 75
C. 125
D. 150

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #31
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

32. This externality could most effectively be corrected by

A. taxing vaccines.

B. encouraging people to negotiate private payments to those who receive the vaccine.

C. subsidizing vaccines.

D. free provision of 275 vaccines.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #32
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

33. The major implication of the _____ is that individuals can solve many externalities if they can buy and sell the right to generate the externality.

A. Sherman Act

B. Coase Theorem

C. tragedy of the commons

D. prisoner's dilemma

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #33
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Tamer lives in a residential neighborhood that prides itself on well-groomed lawns. Tamer's neighbors find that the collective marginal benefit of someone else's well-groomed lawn is $10. Tamer, however, dislikes yard work and receives zero net benefit from an unkempt lawn and a net benefit of -$1 for a well-groomed lawn – the cost of maintaining the lawn is a dollar more than the benefit of having a well-groomed lawn.

	Unkempt	Well-groomed
Net Value to Tamer	0	-1
Net Value to Tamer's neighbors	0	+10

Frank - Chapter 10

34. The issue of Tamer, his neighbors, and the state of his lawn is an example of a(n)

A. externality.
B. commitment problem.
C. prisoner's dilemma.
D. positional externality.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #34
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

35. If Tamer acts independently, Tamer's lawn will be _____ and total economic surplus to the neighborhood will be _____.

A. well groomed; $10
B. well groomed; $5
C. unkempt; 0
D. unkempt; $5

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #35

Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

36. If Tamer's lawn is unkempt, the situation is _____ because the total economic surplus is _____.

A. efficient; nonnegative
B. inefficient; larger than it could have been
C. efficient; as large as possible
D. inefficient; smaller than it could have been

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #36
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

37. The Coase Theorem suggests that

A. the rest of the neighborhood will have to tolerate Tamer's lawn.
B. Tamer could pay the neighbors to stop complaining about the lawn, making everyone in the neighborhood better off.
C. Tamer's neighbors could pay Tamer to have a well-groomed lawn, making Tamer and the neighbors better off.
D. Tamer's neighbors could pay Tamer to have a well-groomed lawn, making Tamer better off and the neighbors worse off.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #37
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

38. Tamer's neighbors would be willing to pay Tamer _____ to keep a well groomed lawn.

A. $1.

B. more than $1 but less than $5.

C. $5.

D. no more than $10.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #38
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

39. Tamer would be willing to keep a well-groomed lawn if the neighbors paid him

A. less than $1.

B. $2.

C. no less than $5.

D. no less than $10.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #39
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

40. If Tamer's neighbors pay Tamer $5 to maintain his lawn, Tamer will have a net benefit of ___ and the neighbors will have a net benefit of _____.

A. +$5; -$5

B. +$4; +$5

C. +$9; 0

D. +$5; $4

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #40
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Suppose there are ten people playing cards in a room. One of them wants to smoke a cigar; nine of them dislike the smell of cigar smoke. The smoker values the privilege of smoking at $5, and each of the other nine occupants of the room would be willing to pay fifty cents for clean air in the room. The rules governing use of the room state that smoking is not allowed unless everyone agrees to allow smoking.

Frank - Chapter 10

41. Which outcome is consistent with the Coase Theorem?

A. The cigar smoker will not be able to smoke because there are more non-smokers in the room.

B. The cigar smoker will pay each other occupant fifty-five cents, and they will agree to allow smoking.

C. The cigar smoker will smoke because the external cost of smoking does not need to be taken into consideration.

D. The cigar smoker will pay each other occupant a dollar, and they will agree to allow smoking.

AACSB: Analytical Skills

Blooms: Application
Frank - Chapter 10 #41
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

42. What is the total economic surplus if the cigar smoker refrains from smoking?

A. -$4.50
B. -$.50
C. $4.50
D. $9.50

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #42
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

43. If the cigar smoker paid each other occupant fifty cents for the right to smoke, the cigar smoker would be _____ and the other occupants would be _____.

A. better off; worse off.
B. better off; just as well off as before the payment.
C. better off; better off.
D. worse off; just as well off as before the payment.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #43
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

44. Now suppose that the rules governing the room are that smoking is allowed unless everyone in the room agrees to prohibit it. In that case,

A. the non-smoking occupants will pay the cigar smoker to not smoke.
B. the cigar smoker will smoke and not have to pay the other occupants for the external cost.
C. the cigar smoker will smoke, and will pay each other occupant 50 cents.
D. the parties may or may not be able to reach a negotiated agreement depending on the bargaining strength of each.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #44
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

45. The Coase Theorem would predict that if the property right to smoke belongs to the cigar smoker, then there _____ smoking in the room. If the property right to clean indoor air belongs to the room occupants, then there _____ smoking in the room.

A. will be; will be
B. will be; will not be
C. will not be; will not be
D. will not be; will be

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #45
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

46. Declaring the card room a non-smoking area with no opportunity to negotiate would

A. decrease total economic surplus.
B. increase total economic surplus.
C. leave total economic surplus unchanged, but redistribute benefits.
D. efficiently solve the externality problem.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #46
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

47. Generally the Coase Theorem implies that the initial allocation of a property right

A. determines all aspects of the final outcome of the negotiated agreement.
B. does not determine which person will be entitled to engage in the externality generating activity, but does determine which person will receive compensation.
C. determines which person will be entitled to engage in the externality generating activity, but does not affect which person will receive compensation.
D. must be assigned to the person with the greatest costs.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #47
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Ashraf and Shihab are considering living alone or being roommates and splitting the rent for the next twelve months. A one bedroom, one bath apartment is $500 per month while a two bedroom, one bath apartment is $800. The one difficulty they have is that Shihab snores very loudly. Ashraf estimates the cost of poor sleep due to Shihab's snoring at $150 per month. Shihab could obtain a snore-eliminating device for $50 per month.

Frank - Chapter 10

48. The least costly solution to the externality present in this situation is for

A. Ashraf to endure Shihab's snoring.

B. both to live alone.

C. Shihab to eliminate his snoring.

D. Shihab to pay Ashraf for his discomfort.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #48
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

49. The actual monthly gain in surplus to Ashraf and Shihab from living together after addressing the snoring problems in the least costly way is

A. $200.

B. $150.

C. $100.

D. $50.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #49
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

50. Ashraf would be willing to pay _____ per month to eliminate Shihab's snoring.

A. exactly $50

B. no more than $100

C. up to $300

D. nothing

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #50
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Suppose Erie Textiles can dispose of its waste "for free" by dumping it into a nearby river. While the firm benefits from dumping waste into the river, the waste reduces the fish and bird reproduction. This causes damage to local fishermen and bird watchers. At a cost, Erie Textiles can filter out the toxins, in which case local fishermen and bird watchers will not suffer any damage. The relevant gains (in thousands of dollars) and losses for the three parties are listed below.

	With Filter	Without
Gains to Erie	$200	$400
Fishermen	$180	$50
Bird Watchers	$130	$25

Frank - Chapter 10

51. When Erie Textiles operates without a filter, the total daily gain (in thousands of dollars) by all three parties is _____.

A. $985

B. $325

C. $510

D. $475

AACSB: Analytical Skills

Blooms: Application
Frank - Chapter 10 #51
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

52. When Erie Textiles operates with a filter, the total daily gain (in thousand of dollars) by all three parties is _____.

A. $985
B. $600
C. $510
D. $475

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #52
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

53. The daily cost (in thousands of dollars) of the filter to Erie Textiles is _____, and the daily net benefit (in thousands of dollars) of the filter to the fishermen and bird watchers is _____.

A. $400; $310
B. $310; $200
C. $200; $75
D. $200; $235

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #53
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

54. If Erie Textiles does not install the filter there will be a net social _____ of _____ (in thousands of dollars).

A. loss; $35

B. gain; $75

C. loss; $110

D. gain; $200

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #54
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

55. Local fishermen and bird watchers would be willing to compensate Erie Textiles _____ for operating with a filter.

A. up to $310 thousand dollars

B. no more than $235 thousand dollars

C. no more than $75 thousand dollars

D. nothing

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #55
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

56. If all three parties can communicate and negotiate with each other at no cost, will Erie Textiles use a filter?

A. No, because it makes $200 less in profit with the filter.
B. Yes, because the benefit it would receive from being able to advertise that it acts in an environmentally responsible way exceeds the cost of using a filter.
C. No, because use of a filter would result in smaller total economic surplus.
D. Yes, because fishermen and bird watchers are willing to pay enough to Erie Textiles to offset the cost of using a filter.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #56
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

57. Suppose that Erie Textiles can only negotiate with one of the affected groups. Will Erie operate with a filter?

A. Yes, if they negotiate with the Bird Watchers, but not if they negotiate with the Fishermen.
B. No, regardless of which group they negotiate with.
C. Yes, if they negotiate with the Fishermen, but not if they negotiate with the Bird Watchers.
D. Yes, regardless of which group they negotiate with.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #57
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Suppose that the government has proposed strict controls on the amount of sulfur diesel fuel contains. These controls were designed to fully offset the cost of pollution generated by diesel fuel vehicles. The effect of the regulation is estimated to increase the equilibrium price of a gallon of diesel fuel by 10 cents.

58. Assuming that the supply of diesel fuel has a positive slope and demand has a negative slope one can infer that the government determined that

A. the external benefit of using diesel fuel is less than 10 cents.
B. the external cost of using diesel fuel is greater than 10 cents.
C. the external cost of using diesel fuel is less than 10 cents.
D. the external cost of using diesel fuel is equal to 10 cents.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #58
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

59. Assuming that the supply of diesel fuel has a positive slope and demand has a negative slope, the quantity of diesel fuel sold after imposition of the regulation will

A. remain the same.
B. increase.
C. decrease.
D. decrease only if diesel fuel is a normal good.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #59
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

60. Suppose that demand for diesel fuel is perfectly inelastic and supply has a positive slope. The effect of the regulation will _____ than if demand were not perfectly inelastic.

A. increase price and quantity by more
B. Increase price by less and reduce quantity by more
C. decrease price and quantity by more
D. increase price by more and reduce quantity by less

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #60
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

61. From the perspective of an externality, most communities have zoning laws to

A. control external benefits.
B. control external costs.
C. encourage positive externalities.
D. raise government revenues.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #61
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

62. Which one of the following government actions is intended to generate positive externalities?

A. Free speech laws

B. Speed limits on the highways

C. Requiring autos to meet minimum emissions regulations

D. Subsidies for planting trees on hillsides

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #62
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

63. The most efficient distribution of pollution abatement among polluters is

A. a geographically equal abatement.

B. a fixed percent reduction for all.

C. for large reductions from the largest polluters.

D. when the marginal cost of abatement is the same across all polluters.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #63
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

64. If the marginal costs of pollution abatement are different across firms, then regulations that require fixed percentage reductions in pollution will be

A. efficient.

B. inefficient

C. ineffective.

D. fair to all polluters.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #64
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

65. For a fixed percent reduction in pollution emissions to be economically efficient, it would have to be the case that

A. the marginal cost of pollution control is the same across all firms.

B. enforcement is vigorous.

C. all firms be the same size.

D. large polluters reduce emissions by more than small polluters.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #65
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

66. Assume that larger firms can reduce pollution emissions more cheaply than smaller firms. A fixed percent reduction in pollution emissions would therefore

A. penalize large and small firms equally.

B. penalize large firms more.

C. ensure the reduction in pollution was achieved at the lowest cost.

D. penalize smaller firms more.

AACSB: Reflective Thinking Skills

Blooms: Analysis

Frank - Chapter 10 #66

Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.

Section: Using Price Incentives in Environmental Regulation

Suppose that there are three power-generating plants, all of which generate emissions. The table summarizes the cost of emission reduction for each firm given five different levels of pollution:

Tons of smoke emitted per day	4	3	2	1	0
Total abatement cost, firm A	0	$14	$30	$50	$75
Total abatement cost, firm B	0	$20	$45	$80	$120
Total abatement cost, firm C	0	$25	$60	$100	$150

Frank - Chapter 10

67. In the absence of either government regulation or private negotiation, total expenditure on pollution abatement will be $_____, and total pollution will be _____.

A. 0; 4 tons

B. 0; 12 tons

C. 59; 9 tons

D. 44; 8 tons

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #67

Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.

Section: Using Price Incentives in Environmental Regulation

68. Suppose the government requires the three firms to reduce pollution to 2 tons of smoke per day, for a total of 6 tons. This will result in a total cost of _____.

A. $59
B. $42
C. $230
D. $135

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #68
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

69. It would cost Firm A ____ to reduce emissions by one ton if it currently emits 3 tons, and ___ to reduce an additional ton of emissions if it currently emits 2 tons.

A. $14; $20
B. $14; $16
C. $16; $20
D. $30; $50

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #69
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

70. In general, all three firms face _____ costs of abatement, suggesting that the principle of _____ applies to pollution abatement.

A. increasing marginal; low-hanging-fruit
B. excessive; cost-benefit
C. high; adverse selection
D. decreasing average; economies of scale

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #70
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

71. Suppose that the government imposes a tax of $20 per ton of pollution generated. If Firm A produces 2 tons of smoke, its abatement costs plus taxes will total ____, and if Firm A produces 3 tons of smoke, its abatement costs plus taxes will total ____. Firm A will be better off emitting

A. $30; $14; 3 tons than 2 tons
B. $40; $24; 3 tons than 2 tons
C. $36; $74; 2 tons than 3 tons
D. $70; $74; 2 tons than 3 tons

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #71
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

72. Suppose that the government imposes a tax of $21 per ton of pollution generated. Firm A will emit ____ tons; Firm B will emit ___ tons and Firm C will emit ___ tons.

A. 0; 2; 3

B. 1; 3; 4

C. 3; 4; 4

D. 1; 2; 4

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #72
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

73. The least costly way of lowering smoke emissions from 12 tons to 9 tons would be for

A. each firm to reduce emissions by 1 ton, emitting 3 tons each.

B. Firm A to emit 1 ton, and the other firms to emit 4 tons each.

C. Firm A to emit 2 tons, Firm B to emit 4 tons and Firm C to emit 3 tons.

D. Firm A to emit 0 tons; Firm B to emit 4.5 tons and Firm C to emit 4.5 tons.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #73
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

74. What tax, in whole dollars per ton, would have to be charged to reduce smoke to 5 tons per day?

A. $21

B. $26

C. $36

D. $41

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #74
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

Two firms can use five different technologies to produce the same quantity of output: 1, 2, 3, 4 and 5. The first technology is the cheapest, but also the dirtiest. The fifth technology is the most expensive, but results in the lowest levels of pollution. The amount of pollution emitted by each firm and the cost of the technologies are shown in the table.

Technology	1	2	3	4	5
Emissions	10 tons	8 tons	6 tons	4 tons	2 tons
Acme's Costs	$750	$800	$1000	$1400	$2000
FirmCo's Costs	$500	$700	$1200	$2200	$4000

Frank - Chapter 10

75. In the absence of either government regulation or private negotiation, the 2 firms will produce using technology _____ and pollution will be _____.

A. 3; 12 tons

B. 5; 4 tons

C. 2; 16 tons

D. 1; 20 tons

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #75

Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

76. Suppose the firms are both currently using technology 1, and that the government adopts rules requiring each firm to reduce pollution by 20%. To comply, the firms will adopt technology ___ for a total cost of _____.

A. 1; $1250.
B. 2; $1500.
C. 3; $2200.
D. 4; $3600.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #76
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

77. Suppose that the government imposes a tax of $150 per ton of pollution. As a result, Acme adopts technology _____, and FirmCo adopts technology_____.

A. 2; 1
B. 3; 2
C. 3; 3
D. 4; 3

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #77
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

78. Suppose that the government imposes a tax of $150 per ton of pollution. As a result, pollution emissions are _____ tons for a total cost of ____ .

A. 6; $4200

B. 8; $3600

C. 10; $3600

D. 14; $1700

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #78
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

79. The major difficulty with using a tax on pollution instead of a fixed percentage reduction regulation is

A. nonpayment of the tax.

B. it would cause prices to rise.

C. that it only works in theory.

D. establishing the optimal size of the tax.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #79
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

80. Compared to a fixed percentage reduction regulation, a tax on pollution encourages

A. all firms to reduce pollution by the same percent.

B. all firms to use the same technology to reduce pollution.

C. firms that can most cheaply reduce pollution to make sizable reductions.

D. economic inefficiency.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #80
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

81. In the absence of environmental protection laws, firms pollute because

A. business owners follow different norms than do environmentalists.

B. controlling emissions costs money, reducing profits.

C. business owners do not believe that pollution is a problem.

D. the cost pollution imposes on society is small relative to the cost of reducing pollution.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #81
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

82. The advantage to selling pollution permits rather than using a fixed percent reduction for all firms is

A. government raises additional revenue.

B. reductions in pollution are accomplished by those firms that can do so at least cost.

C. enforcement costs are eliminated.

D. pollution is driven to zero.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #82
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

83. The use of pollution permits by the government to reduce pollution is

A. theoretically interesting, but untried in the United States.

B. unworkable.

C. common in several parts of the United States.

D. common in the third world.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #83
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

84. Compared to the taxing of pollution, pollution permits offer the advantage of

A. eliciting the largest reduction in pollution from those firms that can do so most cheaply.

B. raising revenues for the government.

C. allowing the public to influence the amount of pollution allowed through the purchasing of permits.

D. ensuring all firms reduce pollution by the same percentage.

AACSB: Analytical Skills

Blooms: Understanding

Frank - Chapter 10 #84

Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.

Section: Using Price Incentives in Environmental Regulation

Two firms can choose from five different technologies to reduce their pollution: A, B, C, D and E. The amount of pollution emitted by each technology and the cost of the technologies are shown in the table. Both firms have adopted technology A and currently emit 4 tons apiece. The government is considering two plans to reduce pollution: a 50% reduction by both firms or selling pollution permits. One permit entitles the owner to emit one ton of pollution. Without a permit, no pollution can be emitted.

	A: 4 tons	B: 3 tons	C: 2 tons	D: 1 ton	E: no pollution
Industrio	$350	$400	$500	$700	$1000
Capitalista	$225	$250	$290	$400	$600

Frank - Chapter 10

85. A government regulation that requires both firms to reduce pollution by 50% results in process _____ being adopted and the private costs are _____.

A. A; $575

B. B; $650

C. C; $790

D. D; $1100

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #85
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

86. If the government decided to use permits instead of regulation, in order to reduce pollution by 50% it would need to sell _____ permits.

A. 4

B. 2

C. 3

D. 5

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #86
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

87. Industrio would be willing to pay up to ___ for the right to discharge 1 ton of pollution, and Capitalista would be willing to pay up to __ for the right to discharge 1 ton of pollution.

A. $50; $25

B. $1000, $600

C. $50, $50

D. $300, $200

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #87
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

88. Suppose a permit system has been adopted and each firm has already purchased one permit. Industrio would be willing to pay up to ___ for the right to discharge a second ton of pollution, and Capitalista would be willing to pay up to __ for the right to discharge a second ton of pollution.

A. $200; $300

B. $200; $110

C. $100; $40

D. $500; $290

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #88
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

89. Suppose the government decides to sell 6 permits allowing a total of 6 tons of pollution. The government starts the bidding with an opening price of $30. What happens next?

A. A total of five permits will be demanded, forcing the government to lower the price.
B. Industrio will purchase all available permits at $30.
C. Industrio will demand 3 permits and Capitalista will demand 3 permits.
D. A total of seven permits will be demanded, forcing the government to raise the price.

AACSB: Reflective Thinking Skills
Blooms: Application
Frank - Chapter 10 #89
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

90. The ultimate equilibrium price of six permits is _____ with Industrio buying _____ and Capitalista buying _____.

A. $100; 3; 3
B. $110; 2; 4
C. $50; 4; 2
D. $300; 3; 3

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #90
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

91. Suppose the government decides to sell 6 permits and an environmental group is determined to only allow 5 tons of pollution to be emitted. To accomplish its goal, the environmental group should bid _____ for the permit.

A. $301

B. $201

C. $111

D. $51

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #91
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

Suppose that a government agency is trying to decide between two pollution reduction policy options. Under the permit option, 100 pollution permits would be sold, each allowing emission of one unit of pollution. Firms would be forced to shut down if they produced any units of pollution for which they did not hold a permit. Under the pollution tax option, firms would be taxed $250 for each unit of pollution produced. The regulated firms all currently pollute and face varying costs of pollution reduction, though all face increasing marginal costs of pollution reduction.

92. Suppose the permit policy is adopted. A firm will wish to purchase its first permit if the price of that permit is less than or equal to

A. the cost of reducing its existing pollution by one unit.
B. the lowest cost of eliminating one unit of pollution.
C. the marginal cost of eliminating its last unit of pollution and operating completely pollution free.
D. the average cost of eliminating one unit of pollution.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #92
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

93. Suppose the tax policy is adopted. A firm will be willing to pay the tax if $250 is less than or equal to

A. the cost of reducing its existing pollution by one unit.
B. its marginal revenue.
C. its average total cost of production.
D. the average cost of eliminating one unit of pollution.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #93
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

94. Because firms face increasing marginal costs to reduce pollution, demand for pollution permits will be

A. upward sloping.

B. downward sloping.

C. perfectly inelastic.

D. perfectly elastic.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #94
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

95. The two policies being considered will result in the same amount of pollution reduction

A. never.

B. always.

C. only if the equilibrium price in the pollution permit market is $250.

D. only if the regulating agency opens the bidding for permits at $250.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #95
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

96. Suppose the regulators chose the permit policy. What might explain that decision?

A. Permit auctions raise more revenue than do taxes.

B. The permit policy allows regulators to achieve reduction goals without having detailed knowledge about firms' abatement costs.

C. The permit policy will reduce pollution by more than would the tax policy.

D. Firms prefer the permit policy because it allows them to choose the least-cost reduction technology.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #96
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

97. Pollution permit policies achieve an _____ outcome because

A. inefficient; wealthier firms can dominate the market.

B. efficient; the supply of permits is elastic.

C. inefficient; the supply of permits is set by the government, and so is inelastic.

D. efficient; firms have an incentive to minimize costs.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #97
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

98. Suppose that you are an economic researcher, and you have access to detailed information about all of the firms in a given geographic area. You would conclude that the pollution reduction policy in that area is efficient if you observe that

A. all firms produce approximately the same amount of pollution.
B. the cleanest firms are also the most profitable.
C. all firms have approximately equal marginal costs of reduction at current emission levels.
D. all firms currently use the same pollution reduction technology.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #98
Learning Objective: 10-03 Compare and contrast the ways in which taxes and tradable permits can be used to reduce pollution.
Section: Using Price Incentives in Environmental Regulation

99. The optimal quantity of a negative externality is zero if

A. it kills many people.
B. it is costly to negotiate a Coasean solution.
C. people vote against it in a democratic election.
D. the marginal cost of reducing it is zero.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #99
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

100. If the marginal cost of reducing pollution is positive,

A. it should be reduced as much as technically feasible.

B. the marginal benefit is nearly zero.

C. the optimal amount is zero.

D. the optimal amount is greater than zero.

AACSB: Analytical Skills

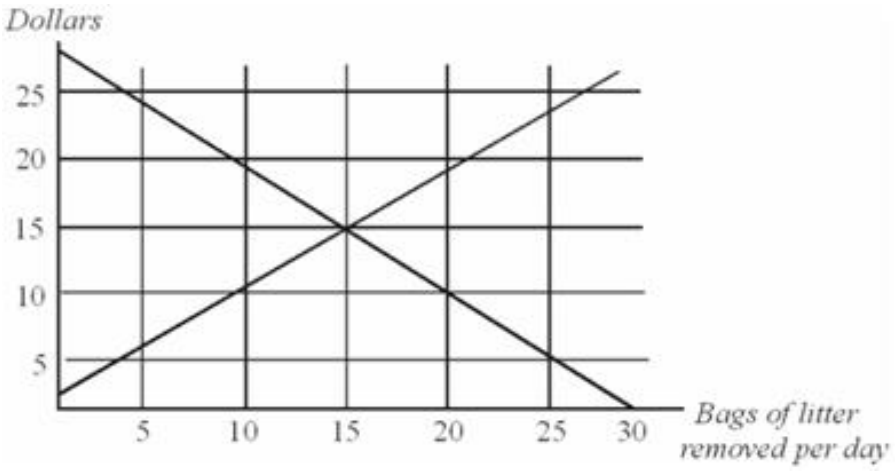
Blooms: Application

Frank - Chapter 10 #100

Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.

Section: External Costs and Benefits

This graph shows the marginal costs and marginal benefits associated with roadside litter clean up. Assume that the marginal cost and marginal benefit curves slope in the usual directions.



Frank - Chapter 10

101. The socially optimal number of bags of litter removed from the roadside is

A. 10.

B. 15.

C. 20.

D. 30.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #101
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

102. From the graph, one can infer that

A. the benefits of picking up the 10th bag of litter exceed the costs.

B. the costs of picking up the 10th bag exceed the benefits.

C. the benefits of picking up the 20th bag exceed the costs.

D. the total benefit of having 30 bags removed is less than the total benefit of having 25 bags removed.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #102
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

103. The marginal cost of removing litter _____ due to the principle of _____.

A. decreases; gains from specialization

B. increases; the Coase Theorem

C. increases; low-hanging fruit

D. decreases; diminishing returns to inputs

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #103
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

104. Picking up the 20th bag of litter would

A. be efficient.

B. increase total economic surplus.

C. create deadweight loss.

D. be socially efficient, but would not be consistent with following self-interest motives.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #104
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

105. According to this graph, the marginal benefit of litter removal is maximized when the ___ bag is removed.

A. first
B. 10th
C. 15th
D. 30th

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #105
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

106. Suppose the state highway department has picked up 15 bags of litter. Protesters have staged a demonstration demanding that the highway department return to pick up the remaining litter. The reason that the protesters have a _____ claim is that:

A. legitimate; litter generates a negative externality.
B. faulty; the additional resources needed to remove more litter could be better used elsewhere.
C. faulty; the government is not responsible for taking care of private property.
D. legitimate; the government has a responsibility to take action when private market incentives do not yield the socially optimal result.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #106
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

107. A state initiative requiring towns to spend at least $20 per day on litter removal would be _____ because _____.

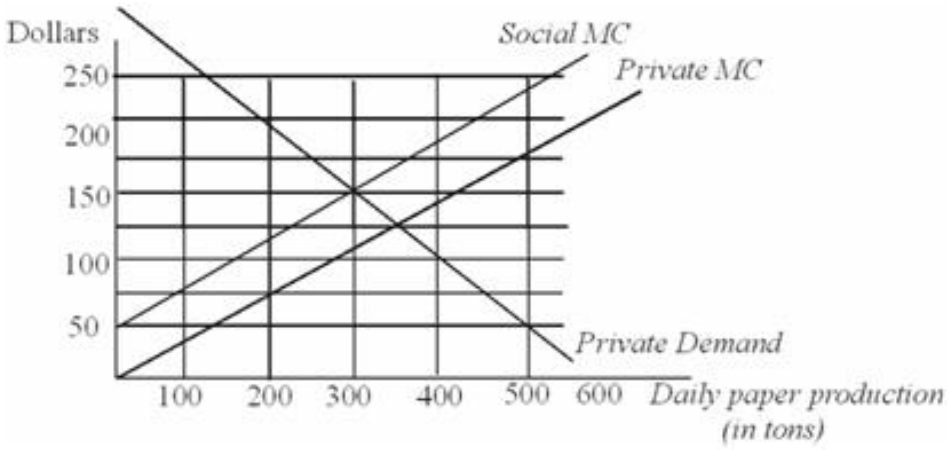
A. efficient; any and all reductions in litter are justified.

B. inefficient; the marginal costs exceed the marginal benefits.

C. inefficient; $20 is insufficient to remove all of the litter.

D. efficient; it solves the inefficiency in the market created by the negative externality.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #107
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits



Frank - Chapter 10

108. Refer to the figure above. From this graph, you can infer that paper production

A. generates no externalities at quantities less than 300 tons per day.

B. generates negative externalities equal to approximately $50 per ton per day.

C. generates negative externalities equal to approximately $25 per ton per day.

D. should be prohibited.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #108
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.

109. Refer to the figure above. This graph suggests that the private market provides incentives to

A. eliminate the externalities generated by paper production.
B. under-produce paper relative to the social optimum.
C. over-produce paper relative to the social optimum.
D. over-price paper relative to the social optimum.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #109
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

110. Refer to the figure above. The invisible hand _____ allocate resources efficiently in the market because

A. does; demand and supply cross at the market equilibrium.
B. does not; some costs of production are not included in private marginal costs.
C. does; firms are motivated to maximize profit.
D. does not; consumers are not willing to pay the external costs of production.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #110
Learning Objective: 10-01 Define negative and positive externalities, and analyze their effect on resource allocation.
Section: External Costs and Benefits

111. Refer to the figure above. When the external cost is included, the efficient equilibrium price is ____ and the socially optimal quantity is _____.

A. $125; 350

B. $125; 225

C. $150; 400

D. $150; 300

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #111
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

112. Refer to the figure above. Assume that a Coase Theorem solution (private negotiation) is impractical for solving the externality problem illustrated. The efficient equilibrium could be achieved by

A. banning production of the good.

B. compensating those injured by the externality.

C. taxing the good by an amount equal to the external cost.

D. subsidizing the good by an amount equal to the external benefit.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #112
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

113. Refer to the figure above. If the firm were forced to pay the external cost, the firm would

A. increase the price of paper by the full amount of the external cost.
B. be unable to increase the price of paper, and so would bear the entire burden of the increased cost.
C. produce more paper than it does at the private market equilibrium
D. share the burden of the higher cost with paper consumers.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #113
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

114. Refer to the figure above. Because production of paper imposes costs on society, the optimal level of production is

A. zero.
B. less than the equilibrium quantity of 300, but more than zero.
C. 300.
D. more than 300 but less than the equilibrium quantity of 350.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #114
Learning Objective: 10-04 Discuss why the optimal amount of an externality is not equal to zero.
Section: External Costs and Benefits

115. The tragedy of the commons refers to the

A. overuse of resources that have no price.

B. overuse of resources that have no cost.

C. under production of external benefits.

D. pollution of our natural resources.

AACSB: Analytical Skills

Blooms: Knowledge

Frank - Chapter 10 #115

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

116. Which of the following would be subject to the tragedy of the commons?

A. Restrooms in a restaurant

B. Timber on public lands

C. Cattle on a ranch

D. Apples in Asal's apple farm

AACSB: Analytical Skills

Blooms: Understanding

Frank - Chapter 10 #116

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

117. Since the cost of obtaining more of any resource is _____, viewing any resource's price as zero leads to _____.

A. positive; underutilization

B. negative; overutilization

C. positive; a surplus

D. positive; overutilization

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #117
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

118. The tragedy of the commons is an example of

A. efficiency gained through operation of the invisible hand.

B. a smart for one, dumb for all situation.

C. increasing marginal costs.

D. comparative advantage and specialization

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #118
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

119. The reason buffalo were driven to extinction while at the same time cattle were thriving is that

A. cattle were owned by ranchers whereas buffalo were wild.
B. demand for buffalo meat was low, discouraging production.
C. Western expansion required killing the Indian's main resource.
D. the price of buffalo hides was very low.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #119
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

Early settlers in the town of Dry Valley drilled wells to pump as much water as they wanted from the single aquifer beneath the town. (An aquifer is an underground body of water.) As more people settled in Dry Valley, the aquifer level fell and new wells had to be drilled deeper at higher cost.

Frank - Chapter 10

120. The aquifer beneath Dry Valley is

A. an external cost.
B. private property.
C. a commons.
D. an external benefit.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #120
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

121. Residents of Dry Valley have a private incentive to ____ water because _____

A. over use; external costs aren't considered.

B. under use; it is a scarce resource.

C. over use; it is a scarce resource.

D. under use; it is characterized by increasing marginal costs.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #121
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

122. The town council has proposed putting a meter on each household's pump, and charging residents for each gallon of water used. This would

A. not change water use.

B. price an un-priced resource, increasing incentives to avoid wasting water.

C. convert private property to public property.

D. reduce total economic surplus.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #122
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

123. In Dry Valley, the supply of water is

A. perfectly inelastic.

B. perfectly elastic.

C. upward sloping.

D. downward sloping.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #123
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

124. A property rights solution to the problem of poaching of elephants for their ivory would be to

A. assign the property rights of the elephant herds to specific tribes.

B. increase enforcement efforts against poachers.

C. ban the importation of ivory.

D. tax ivory products.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #124
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

125. The positive correlation between economic success and well-defined private property rights is

A. a statistical anomaly, and not a causal relationship.

B. an example of capitalist greed and exploitation.

C. due to the observation that, when resources are owned, they are not treated as if they have a marginal cost of zero.

D. only evident in the Western world.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #125
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

126. According to the textbook, limits on private property rights, e.g., zoning laws, are

A. market interventions that reduce the size of the economic pie.

B. generally unnecessary, as people have an inherent incentive to use private property wisely.

C. an attempt to protect or enlarge the total economic surplus.

D. designed to help one group and harm another.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #126
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

127. A resource that has common property rights is one that

A. is subject to common law.

B. benefits everyone equally.

C. one that has no marginal benefit.

D. treated as though it has a price of zero.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #127
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

128. Which of the following is most likely to be used efficiently?

A. A resource that has private property rights

B. A resource that benefits everyone

C. Government owned resources

D. Endangered species

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #128
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

129. In most industrialized countries, private property rights are

A. absolute.

B. rare.

C. subject to limitations.

D. a recent development.

AACSB: Analytical Skills

Blooms: Knowledge
Frank - Chapter 10 #129
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

The following data show the relationship between the number of drivers who leave for work at 8:00 am, their average commute times, and their marginal benefit associated with the commute times.

Number of drivers that leave at 8:00am	Average commute time to downtown	Marginal Benefit
100	30 minutes	$10
200	65 minutes	$8
300	110 minutes	$4
400	170 minutes	$3
500	260 minutes	$1

Frank - Chapter 10

130. If commuters view the highway as having a zero price, one can predict that _____ drivers will leave for downtown at 8:00 am.

A. 500
B. 400
C. 300
D. 200

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #130
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

131. Suppose a toll is imposed in the following way: leaving between 8 a.m. and 9 a.m. costs $5 per driver, after 9 a.m. the toll is zero. One can predict that _____ drivers would be on the road between 8:00 and 9:00 a.m.

A. 100
B. 200
C. 300
D. 400

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #131
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

132. Suppose a toll is imposed in the following way: leaving between 8 a.m. and 9 a.m. costs $5 per driver, after 9 a.m. the toll is zero. The toll _____ because _____.

A. reduces efficiency; citizens are paying for the highway through taxes and through the toll
B. improves efficiency; government now has more tax revenue
C. reduces efficiency; drivers don't change their behavior because $5 is less than the benefit of driving
D. improves efficiency; the highway is no longer treated as having a price of zero

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #132
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

133. An argument for imposition of a toll rather than using a Coase Theorem negotiated solution is that

A. this is not an externality problem.
B. government needs additional revenues.
C. the external cost is not well defined.
D. private negotiations among 500 drivers is impractical.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #133
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

134. The reason drivers would prefer building new roads to a $5 toll to reduce commute times is because

A. building roads is the only cost-effective solution.
B. they know a toll would not alter commuting behavior.
C. a tax solves the commitment problem.
D. the cost of new roads falls on all taxpayers; the toll only falls on those who use the existing road.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #134
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

A village has five residents, each of whom has accumulated savings of $50. Each villager can use the money to buy a government bond that pays 10% interest per year or to buy a year-old goat, send it onto the commons to graze, and sell it after one year. The price of the goat that the villager will get at the end of the year depends on the amount of weight it gains while grazing on the commons, which in turn depends on the number of goats sent onto the commons, as shown in table below.

Number of goats on the commons	Price per 2-year-old goat ($)	Income per goat ($/year)
1	80	30
2	75	25
3	70	20
4	65	15
5	55	5

Frank - Chapter 10

135. The villager will buy a year-old goat if it will command a price of at least _____ as a 2-year-old.

A. $55

B. $75

C. $70

D. $65

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #135

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

136. How many goats will villagers send onto the commons?

A. 2

B. 3

C. 4

D. 5

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #136

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

137. What will be the total village income, if everyone makes the decision that gives him or her the maximum benefit?

A. $5

B. $125

C. $75

D. $25

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #137

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

138. Suppose a village elder decides the total number of goats and bonds with the goal of maximizing total village income. The elder will buy _____ government bond(s) and send ____ goat(s) onto the commons.

A. 0; 5

B. 1; 4

C. 2; 3

D. 3; 2

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #138

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

139. Suppose a village elder decides the total number of goats and bonds with the goal of maximizing total village income. The village income will be _____.

A. $250

B. $125

C. $70

D. $15

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #139

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

140. In order to achieve a socially optimal level of output, activities that generate negative externalities should be

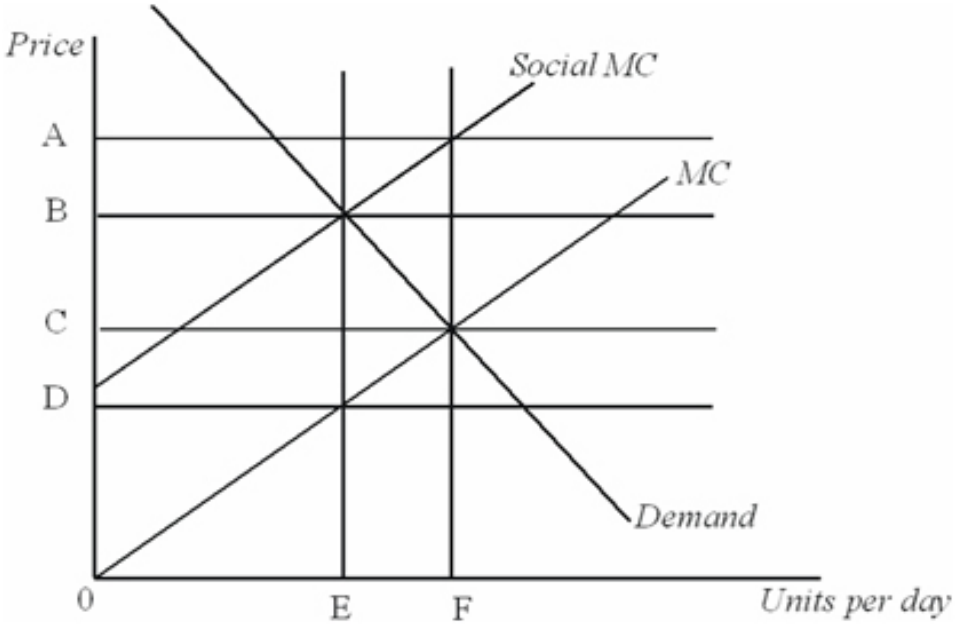
A. banned.
B. subsidized.
C. taxed.
D. bought out by the government.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #140
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

141. In order to achieve a socially optimal level of output, production that generates positive externalities should be

A. required.
B. subsidized.
C. conducted by the government.
D. deregulated.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #141
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits



Frank - Chapter 10

142. Refer to the figure above. This graph describes a production process that

A. generates positive externalities.

B. is used by a perfectly competitive industry.

C. generates negative externalities.

D. has been negotiated using the Coase Theorem approach.

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #142

Learning Objective: 10-02 Explain how the effects of externalities can be remedied.

Section: External Costs and Benefits

143. Refer to the figure above. Private market incentives would result in this good being _____ by_____.

A. overpriced; BD

B. underpriced; BD

C. overpriced; BC

D. underpriced; BC

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #143
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

144. Refer to the figure above. The deadweight loss associated with private incentives in this market is a triangle with area equal to _____.

A. ½ EF times BC

B. ½ 0C times 0E

C. ½ EF times AC

D. ½ EF times AB

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #144
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

145. Refer to the figure above. The social optimum in the market illustrated could be achieved by imposing a _____.

A. subsidy equal to DB

B. tax equal to DB

C. tax equal to BA

D. tax equal to BC

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #145
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

146. Refer to the figure above. In the graph above, the ____ needed to achieve the social optimum is ____ the resulting price change.

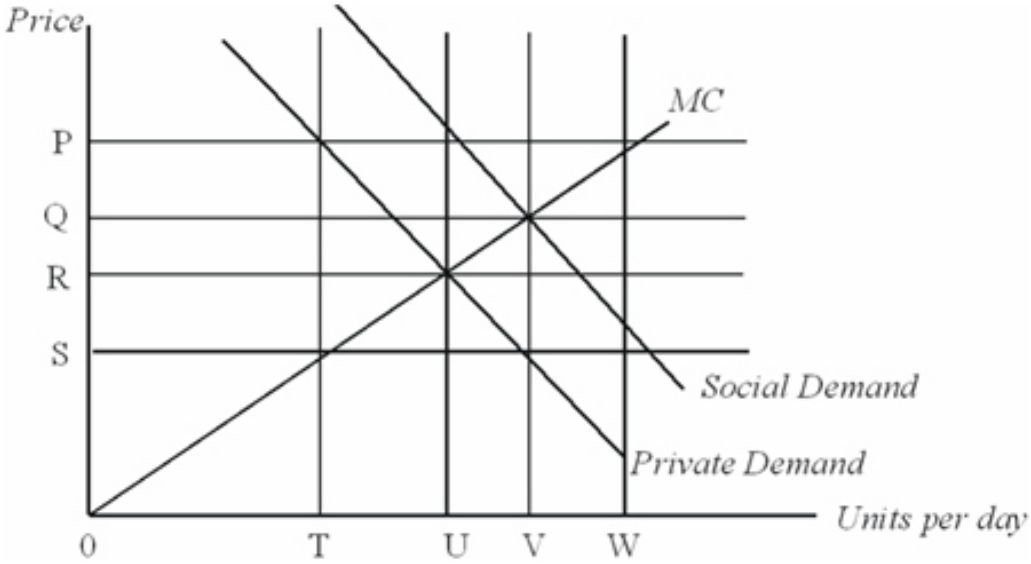
A. tax; equal to

B. tax; greater than

C. tax; less than

D. subsidy; equal to

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #146
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits



Frank - Chapter 10

147. Refer to the figure above. The socially optimal quantity in this market is _____.

A. 0T

B. 0U

C. 0V

D. TV

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #147

Learning Objective: 10-02 Explain how the effects of externalities can be remedied.

Section: External Costs and Benefits

148. Refer to the figure above. At a price of Q,

A. firms are choosing according to private incentives, but ignoring social benefits.

B. firms are passing the entire cost of the externality to their customers.

C. the market will be in equilibrium at the socially optimal quantity of the good without government interference.

D. there will be excess supply in this market if there is no government interference.

AACSB: Analytical Skills

Blooms: Application
Frank - Chapter 10 #148
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

149. Refer to the figure above. Private incentives in this market generate deadweight loss equal to _____.

A. ½ PS times TV
B. ½ PS times TU
C. ½ PR times UV
D. ½ PR times TU

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #149
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

150. Refer to the figure above. A _____ equal to _____ would achieve the social optimum in this market.

A. tax; QS
B. subsidy; RS
C. tax; RS
D. subsidy; QS

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #150
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

151. Refer to the figure above. A corrective _____ would result in consumers paying a price of ____ and producers receiving a price of _____.

A. tax; Q; Q

B. subsidy; R; P

C. subsidy; S; Q

D. tax; Q; S

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #151
Learning Objective: 10-02 Explain how the effects of externalities can be remedied.
Section: External Costs and Benefits

Suppose that lunch in your dorm is an all-you-can-eat buffet, served from 11 a.m. until 1 p.m. By noon the buffet is picked over, and by 12:30 there are few popular items left. The garbage bins, though, are full of food.

Frank - Chapter 10

152. The buffet in your dorm is an example of

A. a Coase-like solution to externalities.

B. a tragedy of the commons.

C. excess supply in the market.

D. a situation in which diminishing marginal utility does not hold.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #152
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

153. Over time, you would expect that students would

A. stop eating so much at lunch because they would notice that it generates waste.

B. start distributing themselves more evenly over the lunch hours to avoid long lines.

C. come earlier and earlier for lunch in order to have a better selection from which to choose.

D. be pickier in their selections from the buffet.

AACSB: Reflective Thinking Skills

Blooms: Analysis

Frank - Chapter 10 #153

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

154. If the cafeteria changed its policy so that students had to pay for each item chosen, students would

A. continue to make the same selections as before, but waste less.

B. select only the most expensive items in the buffet.

C. experience diminishing marginal utility for food at a faster rate.

D. make food selections to equalize the marginal utility per dollar for each item.

AACSB: Reflective Thinking Skills

Blooms: Analysis

Frank - Chapter 10 #154

Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.

Section: Property Rights and the Tragedy of the Commons

155. Bakr owns a beachfront lot with a small house. During seasonal storms, he refuses to leave. Afterward he applies for government assistance to rebuild and files insurance claims for damages. By doing so, Bakr is

A. pursuing life, liberty and the pursuit of happiness.
B. imposing an external cost on himself.
C. imposing an external cost on rescue workers, taxpayers, and insurance policy holders.
D. treating his property as common property.

AACSB: Reflective Thinking Skills
Blooms: Analysis
Frank - Chapter 10 #155
Learning Objective: 10-05 Characterize the tragedy of the commons, and show how private ownership is a way of preventing it.
Section: Property Rights and the Tragedy of the Commons

156. When one's performance is judged relative to others' performance and not by an absolute standard,

A. players will over invest in performance enhancements.
B. players will under invest in performance enhancements.
C. the incentive to sabotage the other players is lessened.
D. a positional externality is not possible.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #156
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

157. According to the textbook, if all athletes took performance-enhancing drugs, the rank ordering of athletes (1st, 2nd, 3rd, etc) would be unchanged. This assumes that

A. performance-enhancing drugs have no effect on performance.
B. performance-enhancing drugs improve the performance of all athletes by the same amount.
C. performance-enhancing drug usage is widespread.
D. performance-enhancing drugs are legal.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #157
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

158. A positional externality

A. can only occur in sports.
B. arises in situations where absolute performance is judged.
C. results in under investment in performance enhancement.
D. occurs when an increase is one player's performance reduces the expected reward of the other players.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #158
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

Suppose that in most car accidents between cars of unequal size, the smaller car sustains the most damage and its occupants suffer the most injury. In answering the following questions, assume that, on average, smaller cars generate less air pollution and that every person in the economy drives at least one car.

159. Relative to driving an average car, driving a larger-than-average car generates

A. an external cost.

B. an external benefit.

C. neither an external benefit nor an external cost.

D. a prisoners dilemma.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #159
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

160. As the average size of cars increases, the incentive to buy a smaller car

A. also increases due to cost savings at the fuel pump.

B. also increases to offset the external cost of air pollution.

C. decreases because of the increased risk of injury in an accident.

D. remains the same because car purchases depend on individual preferences.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #160
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

161. Suppose the size of all cars increased by 25%. Car accidents between two cars would cause _____ and air pollution would _____.

A. less injury; increase

B. greater injury; increase

C. neither greater nor less injury; remain the same

D. neither greater nor less injury; increase

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #161
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

162. Which of the following investments is an example of a positional arms race?

A. Watching your friend training for a FIFA football game.

B. Renting movies for the weekend.

C. Studying hard for the economics test if the professor grades on a curve.

D. Playing golf for fun.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #162
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

163. Suppose that voters in Party A are both wealthier and more likely to make campaign contributions than Party B voters. One could then predict that

A. Party A will be more likely to favor spending limits.
B. both parties will favor campaign spending limits equally.
C. Party B will be more likely to favor campaign spending limits.
D. both parties will oppose campaign spending limits.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #163
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

164. Assume that the town of Pleasantville has two local TV stations. If one of them invests in the newest weather forecasting technology, one can predict that

A. the other station will continue to use its current technology.
B. to maintain its relative standing, the other station will upgrade its radar technology.
C. to maintain its absolute standing, the other station will upgrade its radar technology.
D. the quality of forecasts will remain unchanged.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #164
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

165. From the individual's standpoint, participating in a positional arms race is a _____ from society's point of view, it is _____.

A. dominant strategy; efficient

B. tit-for-tat strategy; efficient

C. dominant strategy; inefficient

D. tit-for-tat strategy; inefficient

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #165
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

166. According to the textbook, social norms can be viewed as

A. a way to establish property rights.

B. a tool of the government.

C. an informal solution to a positional arms race.

D. a useful way to organize marketing campaigns.

AACSB: Analytical Skills
Blooms: Knowledge
Frank - Chapter 10 #166
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

167. Assume that to be labeled a nerd (someone who studies a lot and has high grades) in high school or college is a social negative. According to the textbook,

A. this is a cruel and unfair stereotype.
B. those who study hard would be better off it this negative stereotype was eliminated.
C. the negative stereotype serves to discourage some students from studying hard thus increasing the payoff to those who do.
D. the negative stereotype serves to comfort those who don't study and make poor grades.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #167
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

168. Unkind jokes and sarcastic remarks about whether someone has had Botox injections are

A. a sign of immaturity.
B. inefficient.
C. an attempt to limit the amount of cosmetic procedures by social norms.
D. an example of a positional arms race.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #168
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

169. The inefficiency induced by all positional arms races is that

A. the rankings don't change.

B. the increase in performance diminishes on the margin.

C. the increase in performance is negative.

D. spending on performance enhancements escalates without end.

AACSB: Analytical Skills
Blooms: Understanding
Frank - Chapter 10 #169
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

170. Which of the following is an example of a positional arms control agreement?

A. Campaign spending limits

B. Zoning limits on building height in big cities

C. Regulating acts of free speech that cause more harm than good

D. Speed limits

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Blooms: Understanding
Frank - Chapter 10 #170
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

The following payoff matrix shows the outcomes for the US and the USSR from relying on conventional weapons or atomic weapons. The percentages refer to the fraction of the population that would die if a war occurred under the two weapons strategies. Assume the payoff matrix is for 1945, shortly after the US had demonstrated the destructive power of the atomic bomb in World War II, i.e., the example begins in the upper right cell where USA has atomic weapons and the USSR has only conventional weapons.

		USSR	
		Atomic Weapons	Conventional
USA	Atomic Weapons	In the USA, 60% would die; In the USSR, 60% would die	In the USA 5% would die; In the USSR, 90% would die
	Conventional	In the USA, 90% would die; In the USSR, 5% would die	In the USA 10% would die; In the USSR, 10% would die.

Frank - Chapter 10

171. The Nash equilibrium in this situation is for

A. both countries to have conventional weapons.

B. both countries to have atomic weapons.

C. the USSR to have atomic weapons and the USA to have conventional weapons.

D. the USA to have atomic weapons and the USSR to have conventional weapons.

AACSB: Analytical Skills

Blooms: Application

Frank - Chapter 10 #171

Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.

Section: Positional Externalities

172. After both the USA and USSR have atomic weapons, the dominant strategy for the US is _____ and for the USSR, the dominant strategy is _____.

A. atomic weapons; conventional weapons
B. conventional weapons; atomic weapons
C. conventional weapons; conventional weapons
D. atomic weapons; atomic weapons

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Section: Positional Externalities

173. As a result of the positional externality in this game,

A. both countries are worse off.
B. the United States is better off but the USSR is worse off.
C. the United States is worse off and the USSR is better off.
D. both countries are better off.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #173
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

174. When the United States demonstrated its nuclear capability in the 1950's, the predictable result was

A. the arms race ended.
B. the USSR responded by developing chemical weapons.
C. the USSR developed its nuclear capability.
D. the United States decided to refrain from development.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #174
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

175. Suppose that a diplomat representing the USSR made the following statement to a diplomat representing the United States: "We will disarm all of our atomic weapons and not develop any new ones." That statement is

A. a credible promise because it would convince the United States to disarm as well.
B. a credible promise because it contains a commitment device.
C. a non-credible promise because mutual disarmament yields a worse outcome for both countries.
D. a non-credible promise because of the commitment problem.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #175
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

Shayma and Farah are neighbors. They work at the same firm and hold the same title. Shayma finds that when Farah's consumption rises, Shayma feels worse off. Farah feels the same way towards Shayma's consumption.

176. For both Shayma and Farah,

A. their own consumption is a positional externality.

B. consumption in general is a positional externality.

C. consumption in general has external benefits.

D. each other's consumption generates a positional externality.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #176
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

177. Suppose Farah buys a new Lexus (a luxury car) and shortly thereafter Shayma buys a new Mercedes (also a luxury car). Shayma and Farah seem to be

A. making independent rational consumption decisions.

B. unaware of the other's actions.

C. involved in a positional arms race.

D. imposing external benefits on each other.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #177
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

178. Suppose the firm that employs both Farah and Shayma begins to offer one hour of overtime. It is likely that

A. Farah will work more but not Shayma.
B. Shayma will work more but not Farah.
C. neither Farah nor Shayma will work more.
D. both Farah and Shayma will work more.

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Frank - Chapter 10 #178
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

179. Suppose that after offering the first hour of overtime, the firm that employs Farah and Shayma begins to offer a second hour of overtime. One can predict that

A. Farah will work even more but not Shayma.
B. Shayma will work even more but not Farah.
C. neither Farah nor Shayma will change their work hours.
D. both Farah and Shayma will work even more.

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Section: Positional Externalities

180. An effective mechanism to avoid working all day and all night as their employer offers more and more overtime, Farah and Shayma could

A. stop independently.
B. not let the other's consumption affect them.
C. lobby for limits on the maximum number of hours in a work week.
D. agree between them to stop this silly game.

AACSB: Analytical Skills
Blooms: Application
Frank - Chapter 10 #180
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

Your economics professor has announced the following grading policy: For each exam, the highest score in the class will be entered as a 100%; all other scores will be entered as the percent of that top score. For example, if the highest test score is a 50 out of 100, it will be counted as a perfect paper, and exams with a score of 40 out of 100 will be entered as an 80%. The final grade for the course will be determined using these adjusted percentages, with 90% and above an A, 80% and above a B, 70% and above a C and below 70% not passing.

Frank - Chapter 10

181. This grading scheme

A. uses an absolute standard.
B. uses a relative standard.
C. is too confusing to adequately motivate students.
D. is designed to discourage competitive over-studying.

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Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

182. The students all get together and decide not to study for the next exam because if nobody does extremely well, they will all do okay. This plan

A. requires everyone to follow their dominant strategy.
B. will be stable because there are no incentives to deviate.
C. will be unstable because there is an incentive to break the agreement.
D. is a commitment device, and thus stable.

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Frank - Chapter 10 #182
Learning Objective: 10-06 Define positional externalities and their effects, and show how they can be remedied.
Section: Positional Externalities

183. You would expect that, as the semester progressed, students in this class who cared primarily about good grades would

A. study less and less to maintain low standards and still earn high grades.
B. forget about the grading scheme, and learn to study for the sake of learning.
C. engage in a positional arms race, studying more and more.
D. maintain a stable agreement to not study for exams.

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Frank - Chapter 10 #183
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Section: Positional Externalities

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