j

1.

Levels of Cleanup	Total Cost of Cleanup ($)	Total Benefit of Cleanup ($)
0	0	0
1	7	45
2	37	80
3	92	105
4	172	125
5	272	140

The table above shows the total cost and the total benefit of cleaning up pollution in a community. Which of the following cleanup levels is socially optimal?

(A) 1

(B) 2 ✓

(C) 3

(D) 4

(E) 5

2. Which of the following is likely to result in allocative inefficiency?

(A) An oligopoly market structure ✓

(B) A firm producing at the level of output where price is equal to marginal cost

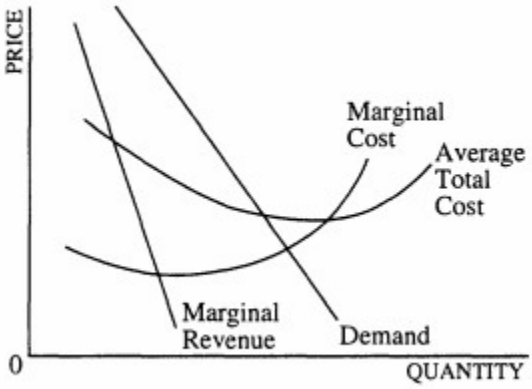
(C) A perfectly competitive market in long-run equilibrium with no externalities

(D) A perfectly price-discriminating monopoly

(E) A monopsonist that faces a minimum wage where marginal revenue product equals the supply of labor

j

3.



The graph above shows the cost and revenue curves for a natural monopoly. Consider the following two policies for regulating this natural monopoly.

Policy I: Require the monopoly to set quantity and price where demand equals marginal cost.

Policy II: Require the monopoly to set quantity and price where demand equals average total cost.

Which of the following is true of these policies?

(A) Both would result in the same level of output and price.
(B) Both would result in an inefficient allocation of resources relative to the unregulated result.
(C) Policy I would result in a lower level of output than would Policy II.
(D) Policy I would result in a higher price than would Policy II.
(E) Policy I might require the payment of a subsidy to the firm. ✓

4. The primary purpose of antitrust laws is to

(A) protect consumers from fraudulent business practices
(B) protect small businesses from unfair foreign competition
(C) prevent firms from monopolizing trade and to promote competition ✓
(D) reduce lawsuits and limit the liabilities of businesses
(E) grant the government the right to take over private property

5. Antitrust laws are designed to maintain a competitive market environment by

(A) eliminating monopolies wherever they exist
(B) preventing monopolies from generating negative externalities
(C) limiting practices that increase a firm's market power ✓
(D) imposing price ceilings on products produced by monopolies
(E) making charging a price above marginal cost illegal

j

6. Antitrust policies are put in place to limit which of the following?

(A) Income inequality

(B) Monopoly power ✓

(C) Double taxation of corporations

(D) Price ceilings

(E) The provision of public goods

7. Antitrust legislation is designed to make it illegal for a firm to monopolize an industry. Which of the following best states the economic rationale for this legislation?

(A) A monopolist produces too little of the good, producing an output that minimizes the average cost of production.

(B) A monopolist produces too little of the good, charging consumers a price that exceeds the marginal cost of production. ✓

(C) A monopolist is more likely to pollute the environment than are firms in a competitive industry.

(D) A monopolist engages in price discrimination, charging low-income people with elastic demand curves a higher price than that charged to high-income people with inelastic demand curves.

(E) A monopolist produces too much of a good, attracting scarce factors of production that might be better utilized in other industries.

8. Antitrust policy is designed to

(A) encourage businesses to produce public goods

(B) establish trust between the government and the business community

(C) prevent businesses from earning profits

(D) maintain a competitive business environment ✓

(E) ensure that businesses earn only zero economic profits in the long run

9. Antitrust policy seeks to prevent or eliminate which of the following practices?

(A) Firing of workers

(B) Collusion and price fixing ✓

(C) Pollution of rivers

(D) Monopolistic competition

(E) Discrimination in the labor market

10. The equilibrium price for a good with a vertical supply curve and a downward-sloping demand curve is $20. If a binding price floor is set, which of the following will occur?

j

(A) There will be a shortage of the good.

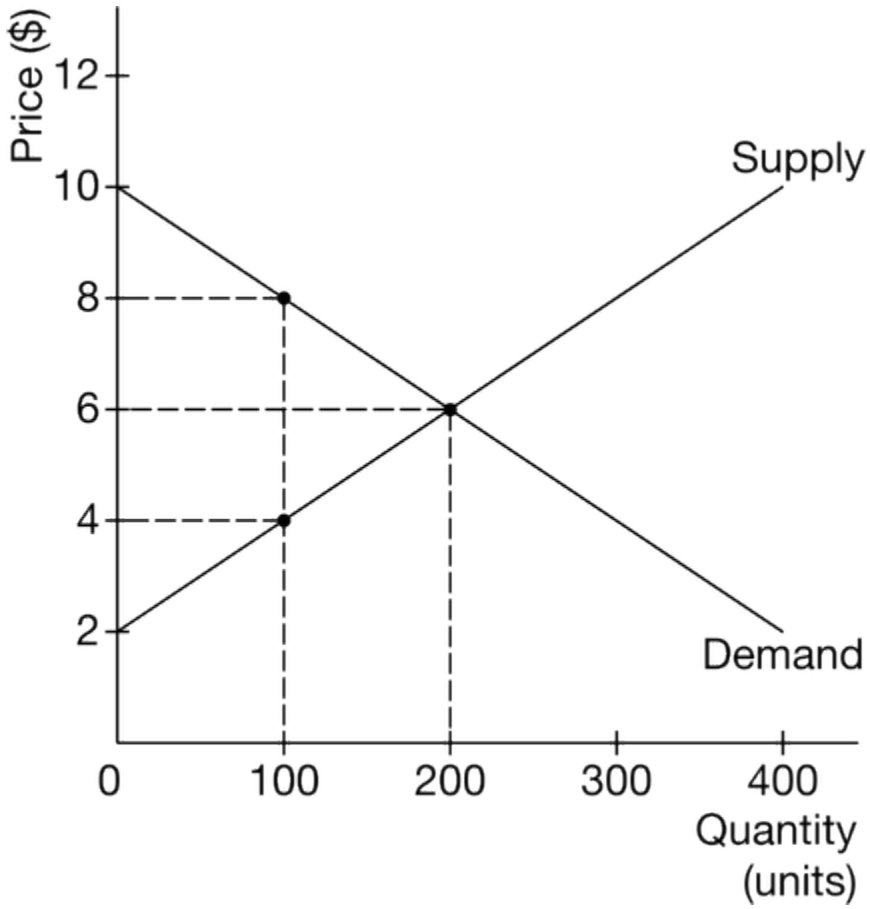
(B) The sum of consumer and producer surpluses will decrease. ✓

(C) The equilibrium price of the good will decrease.

(D) The quantity sold of the good will remain unchanged.

(E) Demand for substitutes for the good will decrease.

11.



Assume that the government imposes a $4 per-unit tax on sellers of a good in the market described by the graph above. What are the price paid by buyers, the after-tax price received by sellers, and the deadweight loss?

j

(A)

Price Paid by Buyers	Price Received by Sellers	Deadweight Loss
$8	$6	$100

(B) ✓

Price Paid by Buyers	Price Received by Sellers	Deadweight Loss
$8	$4	$200

(C)

Price Paid by Buyers	Price Received by Sellers	Deadweight Loss
$6	$6	$0

(D)

Price Paid by Buyers	Price Received by Sellers	Deadweight Loss
$4	$8	$100

(E)

Price Paid by Buyers	Price Received by Sellers	Deadweight Loss
$4	$8	$200

12. Country A has a Gini coefficient of 0.5, and Country B has a Gini coefficient of 0.3. Which of the following statements is definitely true?

(A) Country A has higher average income than Country B.

(B) Country B has higher average income than Country A.

(C) Income is more evenly distributed in Country A than in Country B.

(D) Income is more evenly distributed in Country B than in Country A. ✓

(E) Country A has more deadweight loss than Country B.

13. The Lorenz curve represents the relationship between

j

(A) the cumulative percentage of households and the cumulative percentage of income ✓

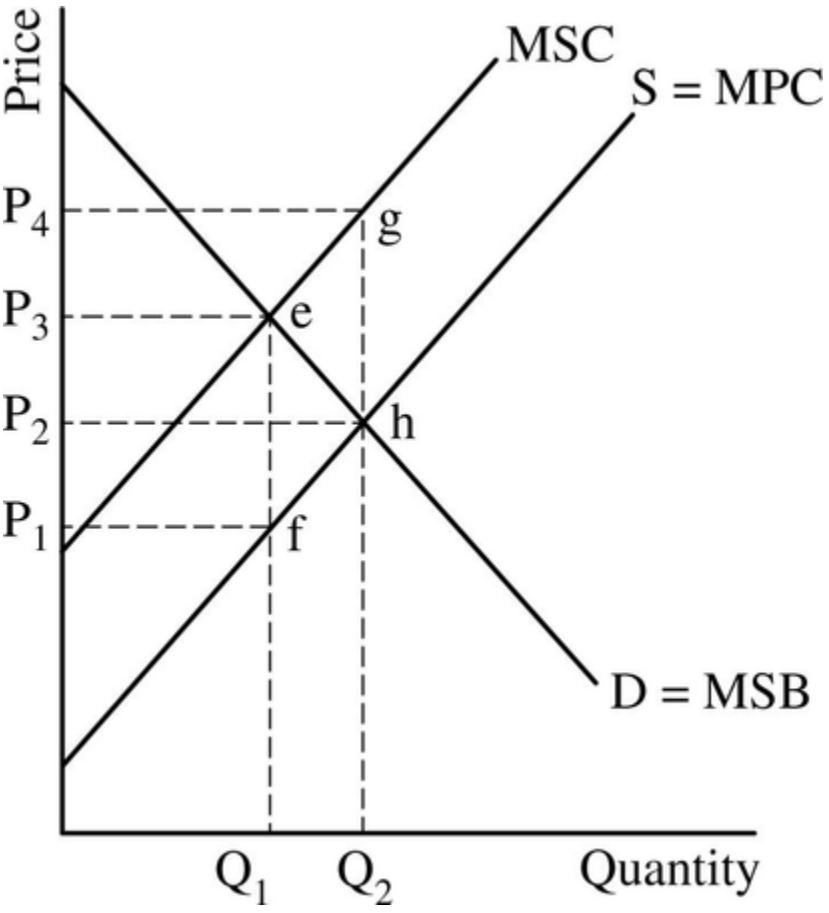
(B) income tax rates and income tax revenues

(C) child labor rates and the poverty levels

(D) income inequality and education level

(E) market structure and the number of firms in the market

The following questions refer to the following diagram, which shows the marginal social cost (MSC), the marginal private cost (MPC), and the marginal social benefit (MSB) associated with the production of a good in a market.



14. Which of the following describes the type of externality generated by the unregulated private market and the resulting deadweight loss?

j

(A)

Type of Externality	Deadweight Loss
Positive	egh

(B)

Type of Externality	Deadweight Loss
Positive	ehf

(C)

Type of Externality	Deadweight Loss
Negative	ehf

(D) ✓

Type of Externality	Deadweight Loss
Negative	egh

(E)

Type of Externality	Deadweight Loss
Negative	P_4ghP_2

15. The government can attempt to correct the externality by setting a

(A) per-unit tax equal to $(P_4 - P_1)$

(B) per-unit tax equal to $(P_4 - P_2)$ ✓

(C) per-unit subsidy equal to $(P_4 - P_2)$

(D) per-unit subsidy equal to $(P_3 - P_2)$

(E) price ceiling at P_2

---

16. To correct for positive externalities, the government should

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j

(A) do nothing, since no harm is done by positive externalities

(B) levy a tax on the output of the good or service

(C) pay a subsidy equal to the marginal external benefit ✓

(D) impose a price ceiling on the good to discourage its production

(E) impose a price floor on the good at which the marginal private benefit equals the marginal social cost

17. One major difference between public goods and private goods is that

(A) public goods exclude nonpaying consumers, while private goods are available to all

(B) public goods are inferior goods, while private goods are normal goods

(C) public goods generate negative externalities, while private goods generate positive externalities

(D) it is difficult to charge customers directly for the provision of public goods ✓

(E) it is impossible for private firms to produce public goods

18. Which of the following is always true about a negative externality?

(A) It can be corrected by the government subsidizing the good or activity that creates the externality.

(B) It results in a market output that is smaller than the socially optimal output.

(C) It results in a market output that is greater than the socially optimal output. ✓

(D) It results in a larger deadweight loss than a positive externality does.

(E) It results in a smaller deadweight loss than a positive externality does.

19. In a perfectly competitive free market economy, a wage gap between two workers can be explained by differences in all of the following EXCEPT their

(A) years of schooling

(B) occupations

(C) marginal products

(D) marginal revenue products

(E) tastes for luxury goods ✓

20. Which of the following actions is most likely to reduce the degree of income inequality within a society?

(A) Lowering the tax rate on income from savings

(B) Increasing regulations on labor unions

(C) Increasing the cost to households of primary and secondary education

(D) Introducing progressive inheritance taxes on accumulated wealth ✓

(E) Eliminating taxes on corporate profits

21. If the goal of government regulators of a natural monopoly is to reduce deadweight loss without subsidizing the monopolist, government regulators would set a price equal to

j

(A) average variable cost

(B) average total cost ✓

(C) average fixed cost

(D) short-run marginal cost

(E) long-run marginal cost

22. Private supply of public goods is most likely to result in

(A) less than the efficient level of output, due to the free-rider problem ✓

(B) less than the efficient level of output, due to the problem of insufficient competition

(C) more than the efficient level of output, due to lower costs of private firms

(D) more than the efficient level of output, due to the existence of externalities

(E) an overuse of these goods

23. Which of the following is the best example of the free-rider problem?

(A) A company gives away free samples of a new product.

(B) A single firm is the sole supplier of corn oil.

(C) There are economies of scale in the production of passenger elevators.

(D) It is difficult to exclude those who do not pay for a good from enjoying the benefits of the good. ✓

(E) There is free entry and exit into production of toothpaste, but products are not homogeneous.

24. Public goods are underproduced in a competitive market because the free-rider problem causes which of the following?

(A) Fixed supply

(B) Effective price ceilings

(C) Reduced market demand ✓

(D) Negative externalities

(E) Increased imports

25. Good X is produced in a perfectly competitive industry in long-run equilibrium. If the consumption of good X generates positive externalities, the private market will produce

(A) less than the socially optimum amount of good X ✓

(B) more than the socially optimum amount of good X

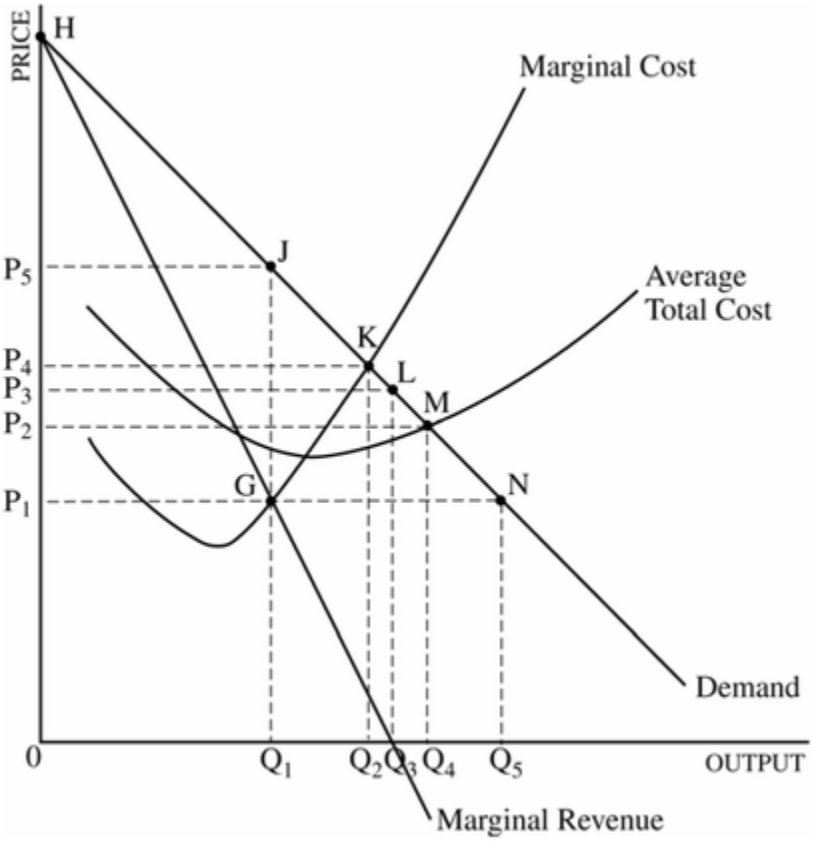
(C) the socially optimum amount of good X

(D) good X only if the government grants a subsidy for the production of good X

(E) good X only if the government levies a corrective tax on the production of good X

j

The following questions refer to the diagram below, which shows the cost and revenue conditions of a monopolist.



26. If the monopolist produces the allocatively efficient level of output rather than the profit-maximizing level of output, consumer surplus will

(A) decrease by the area P_5JKP_4

(B) decrease by the area P_5JMP_2

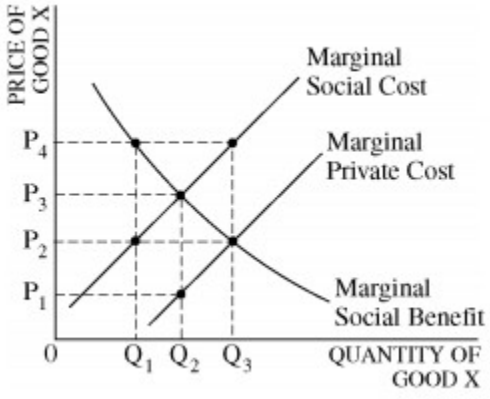
(C) increase by the area P_5JGP_1

(D) increase by the area P_5JKP_4 ✓

(E) increase by the area P_5JMP_2

j

The following questions refer to the diagram below, which shows a market's cost and revenue curves.



27. Given the position of the marginal social cost curve, one can conclude that the

(A) private cost of producing good X exceeds the social cost of production at all levels of output

(B) production of good X creates a negative externality ✓

(C) production of good X occurs in an imperfectly competitive market

(D) market quantity, Q_3, is socially optimal quantity

(E) free market will produce too little of good X

28. The socially optimal quantity and the per-unit tax that will achieve the socially optimal quantity are which of the following?

j

(A)

Socially Optimal Quantity	Per-Unit Tax
Q_1	$P_4 - P_2$

(B)

Socially Optimal Quantity	Per-Unit Tax
Q_2	$P_3 - P_2$

(C)

Socially Optimal Quantity	Per-Unit Tax
Q_3	$P_4 - P_2$

(D) ✓

Socially Optimal Quantity	Per-Unit Tax
Q_2	$P_3 - P_1$

(E)

Socially Optimal Quantity	Per-Unit Tax
Q_3	$P_3 - P_2$

---

29. The government must provide public goods such as national defense because

(A) the production of public goods requires economies of scale that the private sector cannot achieve

(B) it is generally impossible to exclude individuals who value public goods but do not pay for them ✓

(C) public goods cannot be produced in private competitive markets, since they have highly inelastic demand

(D) private producers charge a price that is substantially greater than marginal cost

(E) no single individual should have to pay for public goods, since they benefit society as a whole

---

j

30. If government regulators set price such that a natural monopolist earns only normal profits, price will be set equal to

(A) marginal revenue

(B) marginal cost

(C) average total cost ✓

(D) average revenue

(E) average variable cost

31. The market inefficiency of a negative production externality will be eliminated if a policy is put in place that results in which of the following outcomes?

(A) the level of output produced is maximized

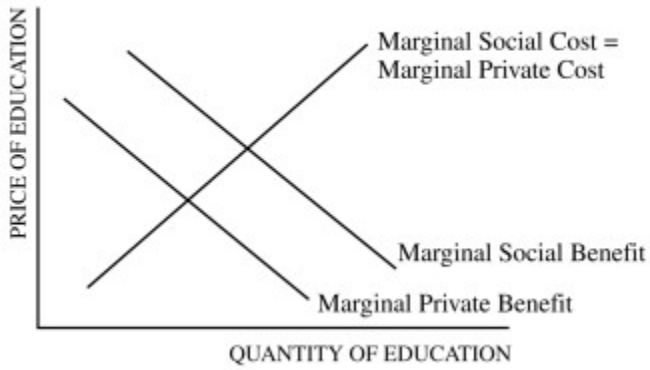
(B) the marginal benefit of production is maximized

(C) the marginal cost of production is minimized

(D) the marginal social benefit of production exceeds the marginal social cost

(E) the marginal social benefit of production is equal to the marginal social cost ✓

32.



Which of the following is true based on the graph above?

(A) Quantity of education in the private market is more than the socially optimal quantity.

(B) Consumers of education could be subsidized in order to achieve the socially optimal quantity. ✓

(C) Producers of education could be taxed in order to achieve the socially optimal quantity.

(D) Consumers of education could be taxed in order to achieve the socially optimal quantity.

(E) Consumption of education has a negative externality.

33. Assume accountants and teachers have identical marginal revenue product schedules. Which of the following provides an explanation for why accountants receive higher starting salaries than school teachers?

j

(A) Accountants have less human capital than school teachers.

(B) Accountants have lower opportunity cost than school teachers.

(C) Accounting firms provide a more pleasant work environment than schools provide.

(D) The supply of accountants is low relative to the supply of teachers. ✓

(E) Fewer teaching majors graduate from college each year than accounting majors.

34.

Quantity of Pollution Reduction (in tons)	Total Benefit (in dollars)
0	0
1	300
2	550
3	650
4	725
5	775

The table above shows the total benefit associated with reducing different levels of pollution on a small island. The cost of eliminating one ton of pollution is $150. Which of the following is the optimal quantity of pollution to eliminate?

(A) 5 tons

(B) 4 tons

(C) 3 tons

(D) 2 tons ✓

(E) 1 tons

35. An increase in the marginal social benefit of consuming a public good should result in

(A) a decrease in public production of the good

(B) an increase in the optimal quantity of the good ✓

(C) a decrease in the optimal quantity of the good

(D) a decrease in the social costs associated with producing the good

(E) a decrease in the social costs associated with consuming the good

36. If firms in a perfectly competitive industry have been dumping toxic waste free of charge into a river, government action to ensure a more efficient use of resources would have which of the following effects on the industry's output and product price?

j

(A)

Output	Price
Decrease	Decrease

(B) ✓

Output	Price
Decrease	Increase

(C)

Output	Price
Increase	Decrease

(D)

Output	Price
Increase	Increase

(E)

Output	Price
Increase	No change

37. In a given year, Jennifer earns $50,000 and spends $40,000. During the same period, Steve earns $30,000 and spends $27,000. If Jennifer and Steve both must pay a 10 percent sales tax on goods purchased, the sales tax is

(A) a higher percentage of income for Jennifer than for Steve

(B) a higher percentage of spending for Steve than for Jennifer

(C) progressive with respect to income

(D) regressive with respect to income ✓

(E) proportional with respect to income

38. Which of the following statements about income inequality is true?

j

(A) A low average household income in a society suggests significant income inequality.

(B) A society with progressive income taxes will likely have a very unequal after-tax distribution of income.

(C) Low taxes on savings tend to lead to a more equitable distribution of after-tax income.

(D) Raising taxes on savings and providing subsidies to low-income households will lead to more equal after-tax and transfer incomes. ✓

(E) Low tax rates on wealth will lead to less unequal income distributions.

39. A progressive income tax is characterized by

(A) a higher average tax rate at low income levels than at high income levels

(B) tax rates that increase total tax revenues

(C) marginal tax rates that do not change as income changes

(D) marginal tax rates that increase as income increases ✓

(E) marginal tax rates that decrease as income increases

40.

PERCENTAGE OF INCOME RECEIVED, 2010

Quintile	Before Taxes and Transfers	After Taxes and Transfers
Lowest 20 percent	1.1	5.1
Second 20 percent	7.9	11.1
Third 20 percent	15.5	16.5
Fourth 20 percent	24.7	23.8
Highest 20 percent	50.7	43.5

The table above shows the distribution of income in Country X in 2010 before and after taxes and transfer payments. Which of the following can be concluded about the effect of the government's tax and transfer policies on income distribution in Country X?

(A) The distribution of income is significantly less equal after accounting for the impact of government policies.

(B) The distribution of income is about the same after accounting for the impact of government policies.

(C) The largest gainers from government policies are the third and fourth quintile groups.

(D) The only quintile to benefit from government policies is the lowest quintile.

(E) The major transfer of income is from the highest quintile to the two lowest quintiles. ✓

41. Which of the following is most likely to reduce inequality in a country's distribution of income?

j

(A) An increase in the population growth rate

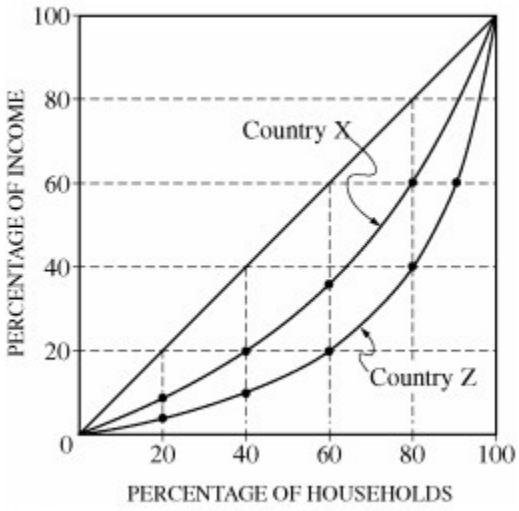
(B) Job training for low-skill workers ✓

(C) An increase in the trade deficit

(D) A decrease in funding for training unemployed workers

(E) A regressive tax rate

42.



Based on the information in the Lorenz curve above, which of the following is true?

(A) People in Country X make more money than people in Country Z.

(B) Income is more equally distributed in Country X than in Country Z. ✓

(C) The top 20 percent of households in Country X received 60 percent of the total income.

(D) The top 20 percent of households in Country Z received 40 percent of the total income.

(E) The average income in Country X is higher than the average income in Country Z.

43. A Lorenz curve can be used by economists to do which of the following?

(A) Show the distribution of personal income ✓

(B) Show the amount of wealth in a nation

(C) Show the amount of consumption in a nation

(D) Explain why different households have different incomes

(E) Explain why income is equally distributed in socialist countries

44. The Lorenz curve is used to study the

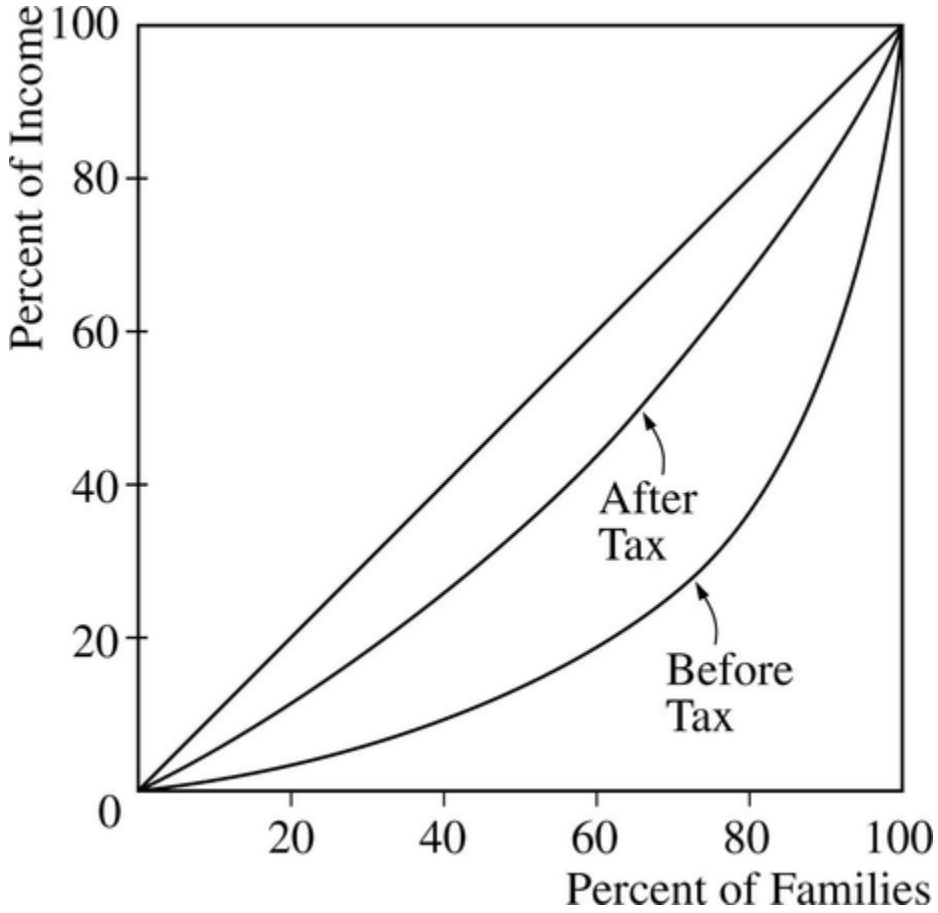
j

(A) relationship between output and unemployment
(B) relationship between income and consumption
(C) extent of income inequality within a society ✓
(D) incidence of an excise tax on buyers and sellers in a market
(E) impact of foreign trade on domestic production of goods

45. A Lorenz curve can be used to evaluate which of the following economic issues?

(A) The allocative and technical efficiency of markets
(B) The comparative advantage of trading partners and the terms of trade
(C) The degree of specialization and growth within countries
(D) The degree of equity in income distribution ✓
(E) The equilibrium of market prices and quantities throughout the world

46.



The Lorenz curves in the graph above show the effects of a tax system on income inequality. Which of the following statements must be true?

j

(A) Before the tax, 20% of families lived below the poverty level, and after the tax, none did.
(B) The tax redistributed income only from the top 20% of families to the lowest 20%.
(C) The tax system is proportional.
(D) The tax system is regressive.
(E) The tax system is progressive. ✓

47. If an industry ignores the external costs it generates in its production, which of the following will be true at the competitive market equilibrium output?

(A) Price will be greater than the marginal social cost.
(B) Price will be less than the marginal social cost. ✓
(C) Price will be equal to the marginal social cost.
(D) Marginal private cost will be equal to marginal social cost.
(E) Marginal private cost will be greater than the marginal social cost.

48. Assume the government introduces a lump-sum tax on each firm within a perfectly competitive industry. Which of the following will be true after the introduction of this tax?

(A) Consumer prices will increase
(B) There will be no change in any firm's level of profits
(C) A deadweight efficiency loss will occur
(D) There will be no change in the market quantity of output ✓
(E) Each firm's short-run marginal cost curve will increase

49. Which of the following is NOT an effective way to manage the inefficiency resulting from a negative externality?

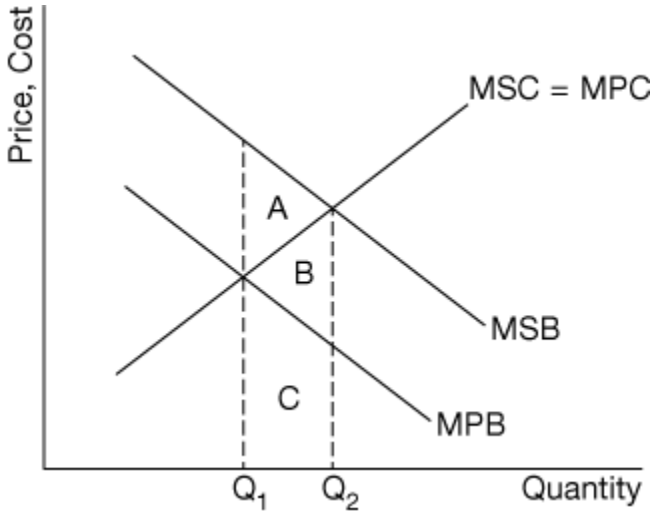
(A) Government intervention in the form of obligatory controls
(B) Per-unit taxes
(C) Assignment of property rights
(D) Lump-sum taxes ✓
(E) Private negotiations among affected parties

50. Pollution abatement policies will improve efficiency if the

(A) marginal benefit of abatement is less than the marginal cost of abatement
(B) marginal cost of abatement is less than the marginal benefit of abatement ✓
(C) marginal cost of abatement is positive
(D) marginal benefit of abatement is positive
(E) marginal cost of abatement is zero

j

51.



The diagram provided illustrates the marginal private benefit (MPB), marginal social benefit (MSB), marginal private cost (MPC), and marginal social cost (MSC) measured in dollars for a competitive market.

Assume that the goal of the government is to increase efficiency in the market. The cost of a government intervention that increases market output from Q_1 to Q_2 is $\$1.2$ million. The intervention will definitely improve market efficiency if the area of

(A) A is greater than $\$1.2$ million ✓

(B) B is less than $\$1.2$ million

(C) C is less than $\$1.2$ million

(D) $\mathrm{A}+\mathrm{B}$ is greater than or equal to $\$1.2$ million

(E) $\mathrm{B}+\mathrm{C}$ is greater than or equal to $\$1.2$ million

52. In the absence of externalities, which of the following is true of a competitive market in equilibrium?

(A) Consumer surplus is maximized.

(B) Producer surplus is maximized.

(C) Marginal benefit exceeds marginal cost.

(D) Marginal social benefit equals marginal social cost. ✓

(E) Consumer surplus equals producer surplus.

53. Which of the following is true of the marginal cost of providing a pure public good to one more consumer?

j

(A) It is positive.

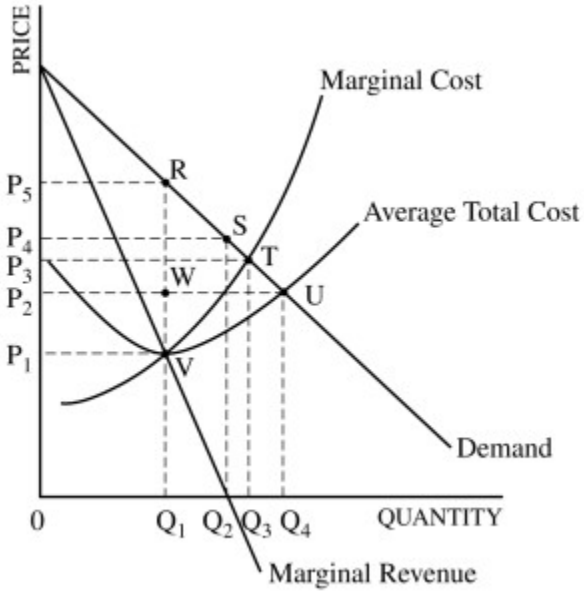
(B) It is equal to zero. ✓

(C) It is equal to the original cost of the good.

(D) It decreases as the number of consumers increases.

(E) It increases as the number of consumers increases.

The following questions refer to the graph of a monopolist shown below



54. If the government regulates the monopolist to set price equal to average total cost, it will establish the price at

(A) P_5

(B) P_4

(C) P_3

(D) P_2 ✓

(E) P_1

---

55. An increase in the effective minimum wage will have less of an impact on employment if the demand for labor is

(A) a derived demand

(B) decreasing

(C) relatively elastic

(D) relatively inelastic ✓

(E) unit elastic

---

j

56. The socially optimal quantity of a public good is provided when

(A) marginal private cost equals marginal private benefit

(B) marginal social cost equals marginal social benefit ✓

(C) total private cost equals total social benefit

(D) total social cost equals total social benefit

(E) marginal social benefit minus marginal social cost is at a maximum

57. National defense is generally provided by the public sector for which of the following reasons?

(A) The opportunity cost of privately providing national defense is too high.

(B) The government always provides the socially optimal quantity.

(C) National defense is a natural monopoly.

(D) National defense is subject to negative externalities.

(E) The benefits of national defense are mostly nonrival and nonexcludable. ✓

58. Which of the following is the best example of a pure public good?

(A) Electricity from a public utility

(B) Mail delivery service by the post office

(C) Social Security payments

(D) National defense ✓

(E) Imported oil

59. National defense is an example of a public good because

(A) it requires tax revenues to fund any production

(B) one person's use of it will decrease another person's ability to use it

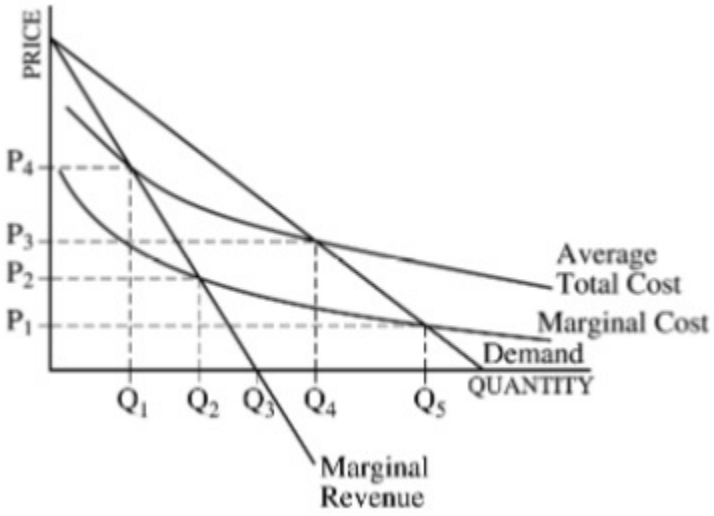
(C) it is nonexcludable and nonrival ✓

(D) the private market typically produces the socially efficient level of output

(E) the public is protected from invasion

j

The question refers to the following diagram of a natural monopolist.



60. If government regulated the natural monopoly to produce the output resulting in zero economic profit, then the output would be

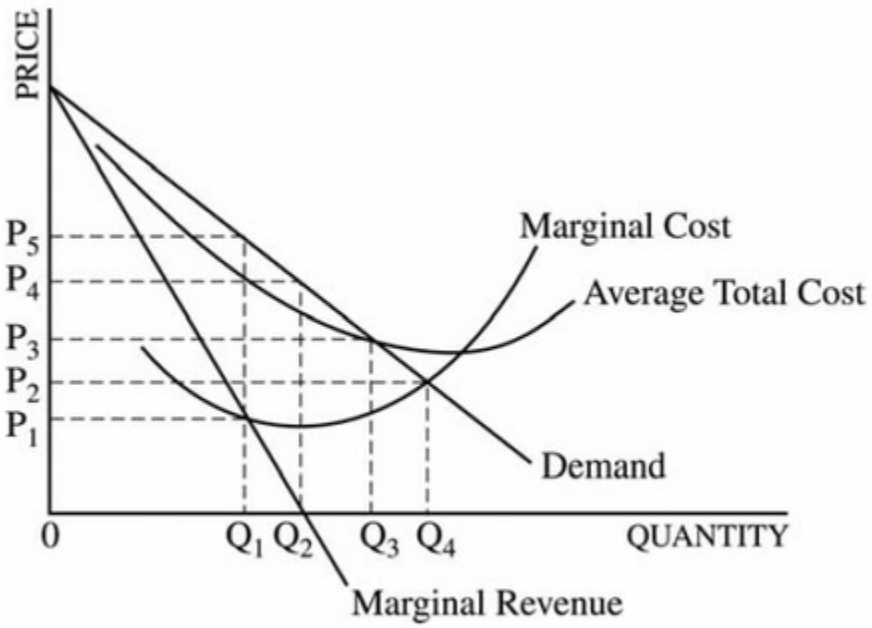
(A) Q_1
(B) Q_2
(C) Q_3
(D) Q_4 ✓
(E) Q_5

61. National defense is a good example of a pure public good because it is

(A) nonrival and nonexcludable ✓
(B) nonrival and excludable
(C) rival and nonexcludable
(D) rival and excludable
(E) free and provided at zero cost

j

The following questions are based on the graph below, which shows the cost and revenue curves of a natural monopolist



62. When the monopolist produces the socially optimal level of output, it is

(A) earning positive economic profit

(B) earning zero economic profit

(C) incurring economic losses and it requires a subsidy to continue in business ✓

(D) maximizing its total revenue rather than profits

(E) maximizing profit

63. If the government wants to regulate this monopoly to produce the socially optimum level of output, it should set a price equal to

(A) P_1

(B) P_2 ✓

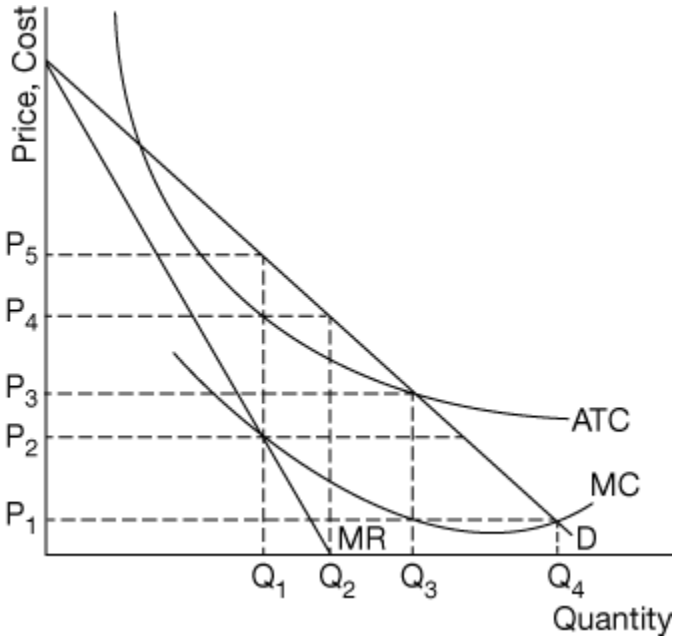
(C) P_3

(D) P_4

(E) P_5

j

64.



The graph provided shows the demand (D), marginal revenue (MR), marginal cost (MC), and average total cost (ATC) curves for a monopolist. If a regulatory agency requires that the monopolist set a price that earns the monopolist a normal profit, what price will the monopolist set?

(A) P_1
(B) P_2
(C) P_3 ✓
(D) P_4
(E) P_5

65. There are negative externalities associated with the use of a freeway in a major city at rush hour because during this time

(A) drivers slow down other drivers because of the high traffic volume ✓
(B) drivers value their time more
(C) government revenues from toll roads increase
(D) revenues of bus companies increase
(E) gasoline costs more

66. The surgeon general has determined that smoking causes cancer and heart disease for both smokers and passive smokers, nonsmokers who breathe smoke-filled air. If cigarette prices are determined in a free market, which of the following will be true?

j

(A) The price of cigarettes will be too low and the quantity sold will be too high. ✓

(B) The price of cigarettes will be efficient but the quantity sold will be too high.

(C) The market will be efficient because markets always equate marginal benefits and marginal costs.

(D) The price of cigarettes will reflect the marginal social benefit received by nonsmokers.

(E) The price of cigarettes will overstate the true social cost imposed on nonsmokers.

67. Which of the following is true when the production of a good results in negative externalities?

(A) The government must produce the good.

(B) The private market will produce too little of the good.

(C) The private market price will be too low. ✓

(D) The government must prevent the production of the good.

(E) Private firms will not be able to maximize profits.

68. Whenever the production of a good creates negative externalities, an unregulated market will result in

(A) too little of the good being produced

(B) an optimal amount of the good being produced as long as the market is perfectly competitive

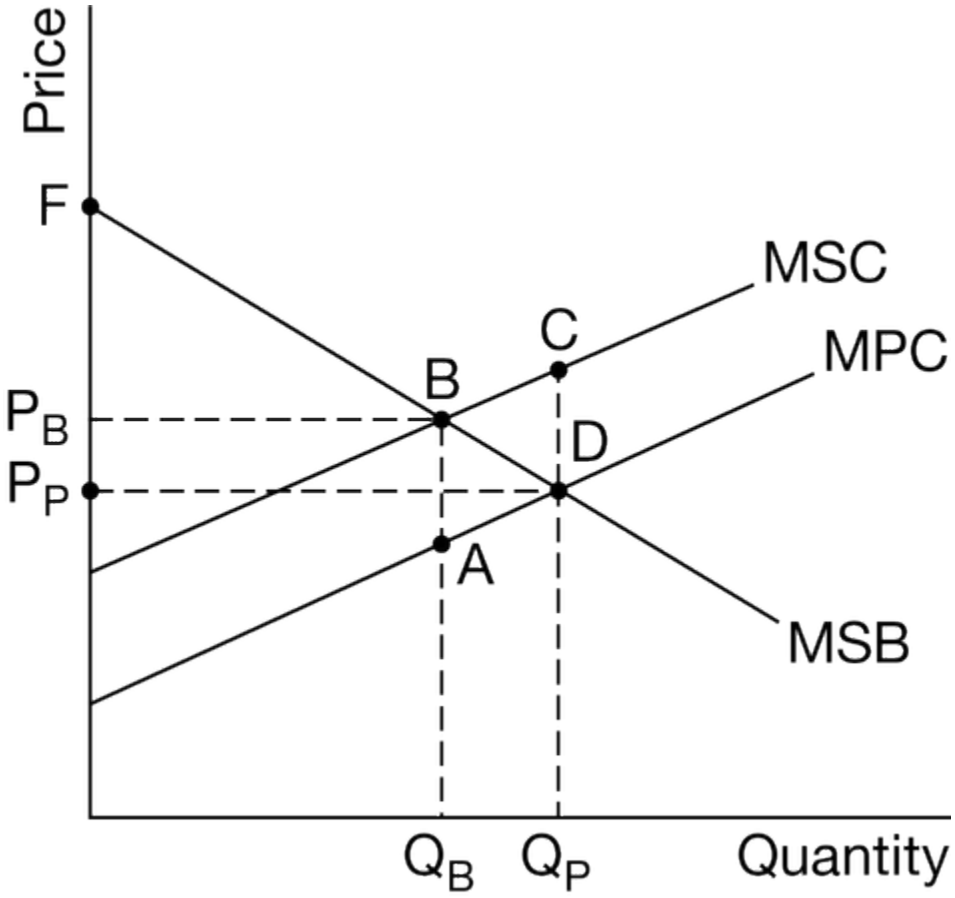
(C) society's marginal cost being higher than the firm's marginal cost ✓

(D) the firm's marginal cost being higher than society's marginal cost

(E) the firm's marginal cost being equal to society's marginal cost

j

69.



The graph above depicts the marginal social cost (MSC), marginal private cost (MPC), and marginal social benefit (MSB) associated with the production of a good that generates an externality. Based on the information in the graph, which of the following is true?

(A) There is a positive externality because, relative to the socially optimal output, too little is produced in an unregulated market.

(B) The unregulated market produces $\mathrm{Q_B}$ and sets price at $\mathrm{P_B}$.

(C) The allocatively efficient level of output is $\mathrm{Q_P}$.

(D) The good generates an external benefit equal to AB.

(E) There is a negative externality because marginal social cost exceeds marginal private cost. ✓

70. Which of the following is true when there are negative externalities associated with the production of a good?

(A) The market will adjust automatically to equate marginal social costs and marginal social benefits.

(B) Marginal social costs will exceed marginal private costs unless businesses are forced to internalize the external costs. ✓

(C) Marginal private costs will exceed marginal social costs, but the government can correct the problem.

(D) Producers should be subsidized so that they will produce more of the good.

(E) Consumers should be subsidized so that they will consume more of the good.

j

71. Which of the following is true if the production of a good imposes external costs?

(A) The market supply curve lies above the social supply curve.

(B) An appropriate government policy would be to subsidize production of the good.

(C) A competitive market would not provide the good at all.

(D) A competitive market would produce more than the socially optimal amount. ✓

(E) A persistent market surplus would occur.

72. If the production of a good generates a negative externality, which of the following is true at the private market equilibrium?

(A) The private market equilibrium quantity is greater than the socially optimal quantity. ✓

(B) The private market equilibrium quantity is equal to the socially optimal quantity.

(C) The marginal private cost is greater than the marginal social cost.

(D) The marginal social benefit is greater than the marginal social cost.

(E) The price of the product equals the marginal social cost.

73. An industry will produce more than the socially efficient level of output under which of the following conditions?

(A) The production or consumption of a good generates a positive externality.

(B) The production or consumption of a good generates a negative externality. ✓

(C) The industry is a monopoly.

(D) The industry produces a public good.

(E) The industry produces a private good.

74. Which of the following best represents a positive externality?

(A) Purchasing a pass for an amusement park

(B) Dining at a favorite restaurant

(C) Being disturbed by neighboring construction noise

(D) Enjoying watching birds at a neighbor’s bird feeder ✓

(E) Dumping waste on someone else’s property

75. Assume the demand curve for a good is perfectly inelastic and the production of each unit of this good generates external costs. A profit-maximizing firm producing the good in an unregulated free market will

(A) generate deadweight loss because marginal social cost is greater than marginal private cost

(B) generate deadweight loss only if marginal costs are constant

(C) not generate deadweight loss because the equilibrium quantity is socially optimal ✓

(D) not generate deadweight loss unless marginal costs are constant

(E) not generate deadweight loss unless fixed costs are zero

j

76. A free-rider problem arises when a good is

(A) nonrival
(B) nondepletable
(C) nonexcludable ✓
(D) produced in a competitive market
(E) produced in a monopolistic market

77. Which of the following is the best example of a negative externality?

(A) An increase in the price of oil due to the imposition of environmental regulations
(B) An increase in the price of oil due to action taken by the Organization of Petroleum Exporting Countries (OPEC)
(C) A decline in oil stock prices as a result of bad management
(D) Oil leakages from drilling platforms in the Gulf of Mexico ✓
(E) Declining restrictions on the importation of foreign-made cars.

78. In a perfectly competitive labor market, an increase in an effective minimum wage will result in

(A) an increase in the supply of workers
(B) a decrease in the supply of workers
(C) a decrease in the demand for workers
(D) more workers being hired
(E) fewer workers being hired ✓

79. Assume that the marginal social benefit of the last unit of vaccination provided is greater than the marginal social cost. Which of the following can be used to achieve efficiency in the market for vaccination?

(A) A per-unit subsidy for vaccinations ✓
(B) A lump-sum tax for vaccinations
(C) A limit on the quantity of vaccinations
(D) A price floor for vaccinations
(E) A price ceiling for vaccinations

80. If a per-unit tax is imposed on a monopolist, how will the monopolist's marginal cost curve, output, and the price paid by consumers be affected?

j

(A)

Marginal Cost	Output	Price
Shift down	Increase	Decrease

(B)

Marginal Cost	Output	Price
Shift Down	Decrease	Decrease

(C)

Marginal Cost	Output	Price
No shift	Decrease	Decrease

(D) ✓

Marginal Cost	Output	Price
Shift Up	Decrease	Increase

(E)

Marginal Cost	Output	Price
Shift up	Increase	Increase

81. The equilibrium quantity of labor used in the production of a good will be the largest under which of the following conditions?

(A) When the labor market is monopsonistic and the output market is perfectly competitive

(B) When the labor market is monopsonistic and the output market is a pure monopoly

(C) When the labor market is perfectly competitive and the output market is a pure monopoly

(D) When both the labor and output markets are perfectly competitive ✓

(E) When laborers are allowed to collude in setting a price

82. If the government imposes a per-unit tax on the output of a monopoly with a downward-sloping demand curve, the burden of the tax will be

j

(A) borne entirely by consumers
(B) borne entirely by the monopolist
(C) borne entirely by the government
(D) shared by the monopolist and the government
(E) shared by consumers and the monopolist ✓

83. Which of the following best defines a pure public good?

(A) A good that is provided free of charge to the public
(B) A good that is provided by the government, whether or not a fee is charged
(C) A good that is efficiently produced only by a monopoly
(D) A good whose benefits can be enjoyed by many consumers at the same time and from which consumers cannot be excluded ✓
(E) A good that by law must be available to all consumers without discrimination on the basis of sex, race, or religion

84. Assume that the firms in an industry pollute a river. If there is no government intervention, the firms will

(A) produce more output than is socially efficient ✓
(B) pay production costs that are higher than actual social costs
(C) charge a lower price than is necessary to maximize profit
(D) charge a higher price to pay for the pollution
(E) increase production to achieve allocative efficiency

85. Under an efficient policy to address the problem of pollution created from manufacturing good X, which of the following is true?

(A) Pollution is completely eliminated.
(B) The marginal private cost of producing good X exceeds the marginal revenue from its sale.
(C) The marginal private cost of producing good X equals the marginal revenue from its sale.
(D) The marginal social benefit of pollution reduction exceeds the marginal social cost of pollution reduction.
(E) The marginal social benefit of pollution reduction equals the marginal social cost of pollution reduction. ✓

86. In a competitive market in which the production of a good causes pollution, the socially optimal output is different from the competitive market equilibrium output of that good because the

(A) marginal social benefit is higher than the marginal social cost
(B) marginal social benefit is lower than the marginal private cost
(C) marginal social cost is higher than the marginal private cost ✓
(D) marginal social benefit is higher than the marginal private benefit
(E) total social cost is less than the total social benefit

j

87. A per-unit tax on pollution produced by a firm will affect the firm's output and pollution levels in which of the following ways?

(A)

Output	Pollution
Increase	Increase

(B)

Output	Pollution
Increase	Decrease

(C)

Output	Pollution
Decrease	Increase

(D) ✓

Output	Pollution
Decrease	Decrease

(E)

Output	Pollution
No change	No change

88. If a positive externality exists in the consumption of a good, the private market equilibrium quantity will be

j

(A) the same as the socially optimal quantity, since the marginal private benefit equals the marginal social benefit

(B) greater than the socially optimal quantity, since the marginal social cost exceeds the marginal private cost

(C) greater than the socially optimal quantity, since the marginal private benefit exceeds the marginal social benefit

(D) less than the socially optimal quantity, since the marginal social benefit exceeds the marginal private benefit ✓

(E) less than the socially optimal quantity, since the marginal private benefit exceeds the marginal private cost

89. Which of the following will most likely lead to a more equal distribution of income?

(A) More regressive national sales tax

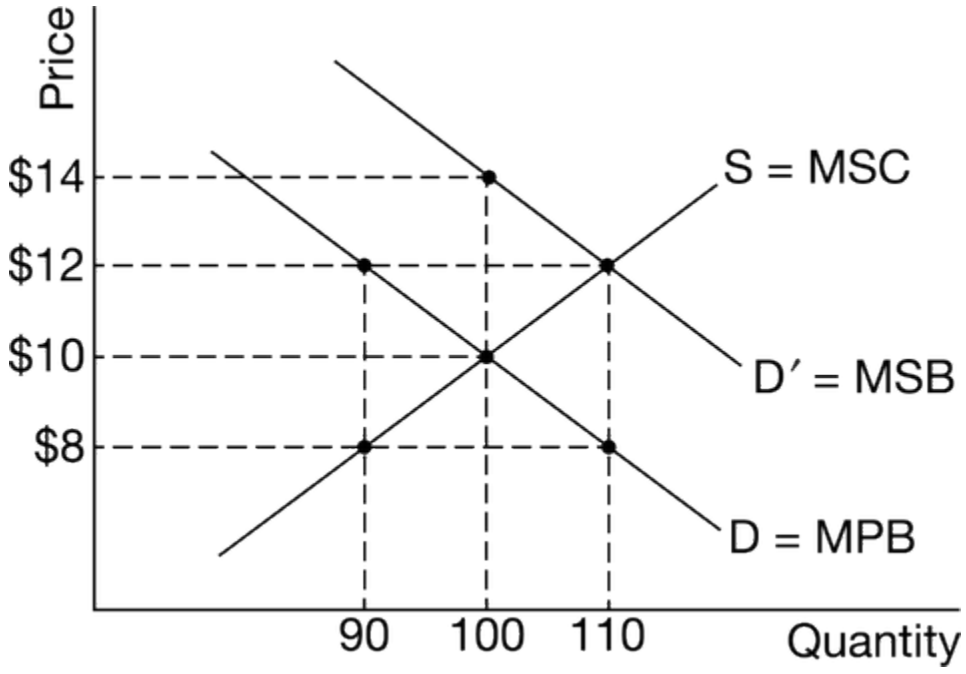
(B) More progressive income taxes ✓

(C) An increase in the high school dropout rate

(D) An increase in structural unemployment

(E) An increase in earnings for owners of capital

90.



The graph above depicts the marginal private benefit (MPB), the marginal social benefit (MSB), and the marginal social cost (MSC) of producing a good. Which of the following correctly identifies both the problem illustrated in the graph and the remedy to the problem?

j

(A) Negative externality; a corrective per-unit tax equal to the external cost of $2 will lead to the socially optimal output.

(B) Negative externality; a corrective per-unit tax equal to the external cost of $4 will lead to the socially optimal output.

(C) Positive externality; a corrective per-unit subsidy equal to the external benefit of $2 will lead to the socially optimal output.

(D) Positive externality; a corrective per-unit subsidy equal to the external benefit of $4 will lead to the socially optimal output. ✓

(E) Positive externality; a corrective per-unit tax equal to the external benefit of $6 will lead to the socially optimal output.

91. Which of the following would create a positive externality?

(A) Congestion on city highways

(B) Water pollution

(C) A neighbor's loud music that wakes you up

(D) Flu vaccination ✓

(E) The greenhouse effect and global warming

92. When consumption of a good generates a positive externality, which of the following must be true at the market equilibrium?

(A) Marginal social benefit is less than marginal private cost.

(B) Marginal social benefit is greater than marginal private benefit. ✓

(C) Marginal social cost is greater than marginal social benefit.

(D) Marginal social cost is less than marginal private benefit.

(E) Marginal social cost is equal to marginal external benefit.

93. Assume a profit-maximizing monopoly and firms in a perfectly competitive market have identical cost and revenue conditions. In which market will a binding price ceiling result in a more efficient outcome and why?

(A) The perfectly competitive market will become more efficient because the deadweight loss will decrease.

(B) The perfectly competitive market will become more efficient because consumers will be able to purchase greater quantities of the good at a lower price.

(C) The monopoly will become more efficient because the deadweight loss will decrease. ✓

(D) The monopoly will become more efficient because producers will be able to sell greater quantities of the good at a higher price.

(E) Both markets will become more efficient because total economic surplus will increase.

94. As an unregulated monopolist, City Cable is earning positive economic profits. If the government regulated the firm by requiring it to produce the level of output that allowed the firm to earn zero economic profit, City Cable would set a price that is equal to its

j

(A) marginal cost
(B) marginal revenue
(C) average total cost ✓
(D) average variable cost
(E) total cost

95. All of the following are sources of inequality in the distribution of personal income EXCEPT

(A) progressive income taxes ✓
(B) discrimination in employment
(C) differences in personal motivation
(D) differences in educational level attained
(E) differences in abilities

96. In the United States, the federal government redistributes income primarily by

(A) setting up planning commissions to set wage rates
(B) taxing different income levels at different rates ✓
(C) guaranteeing every person a minimum income through minimum-wage laws
(D) providing the same goods and services to all citizens
(E) relocating and retraining structurally unemployed people

97. Which of the following is an example of a pure public good?

(A) A hamburger sold in a restaurant on a college campus
(B) Medical education to become a doctor
(C) A hurricane warning siren ✓
(D) Paper pulp produced with pollution emissions
(E) A ticket to the movie theater

98. Public goods are under produced in a competitive market because the free-rider problem causes

(A) supply to be perfectly elastic
(B) a price ceiling to become binding
(C) consumers to not reveal their true demand ✓
(D) positive externalities to increase
(E) demand to be perfectly inelastic

99. Which pair of characteristics is associated with a pure public good?

j

(A) Nonrival consumption and ability to exclude nonpayers
(B) Increasing marginal utility of consumption and a free-rider problem
(C) Rival consumption and an ability to exclude nonpayers
(D) Rival consumption and a free-rider problem
(E) Nonrival consumption and a free-rider problem ✓

100. Which of the following is a characteristic of a public good?

(A) It is excludable.
(B) It is nonrival in consumption. ✓
(C) It yields substantial spillover costs.
(D) The private sector would produce a larger than socially optimal quantity.
(E) Private-sector producers would realize too great a profit.

101. Which of the following is most likely to make a country's income distribution more equal?

(A) Establishing a national sales tax on food and clothing
(B) Establishing a progressive income tax system ✓
(C) Eliminating excise taxes on luxury goods
(D) Proportionally decreasing the tax rate for all income groups
(E) Reducing the subsidy to education

102. Which of the following taxes contributes most to decreasing inequality in the distribution of income?

(A) Progressive income taxes ✓
(B) Sales taxes
(C) Proportional income taxes
(D) Excise taxes
(E) Import tariffs on necessities

103. A pure public good is a good that is

(A) provided efficiently by markets
(B) rivalrous and excludable in consumption
(C) nonrivalrous and excludable in consumption
(D) rivalrous and nonexcludable in consumption
(E) nonrivalrous and nonexcludable in consumption ✓

104. A governmental welfare program that taxes the labor income of the wealthy and redistributes the tax revenue to low-income citizens will

j

(A) increase income inequality and efficiency

(B) decrease income inequality and efficiency ✓

(C) increase income inequality and decrease efficiency

(D) decrease income inequality and increase efficiency

(E) decrease income inequality and not affect efficiency

105. A chemical plant pollutes a river that serves as the water supply for a nearby town. From an economist's point of view, pollution from the plant should be reduced until the

(A) marginal benefit from the cleaner water is equal to the marginal cost of making the water cleaner ✓

(B) marginal benefit from cleaner water is maximized

(C) total benefit from cleaner water is zero

(D) total benefit from cleaner water is equal to the total cost of making the water cleaner

(E) total benefit from cleaner water is maximized

106. Which of the following best demonstrates nonrivalry in consumption?

(A) Occupying a seat in a sold-out movie theatre

(B) Sharing rent equally among roommates

(C) Catching fish in a local pond

(D) Playing golf on a crowded public golf course

(E) Listening to a radio program ✓

107. Characteristics of a pure public good include which of the following?

I. Nonpaying consumers cannot be excluded from consuming the good.

II. Consumption by any one person does not reduce the availability of the good to others.

III. The amount consumed depends on the price paid.

(A) I only

(B) II only

(C) III only

(D) I and II only ✓

(E) II and III only

108. Assuming that all residents of the city of Smallville prefer to have streetlights installed citywide, which of the following best explains why individual residents do **not** install the optimal number of streetlights?

j

(A) Streetlights generate negative externalities.

(B) Streetlights are nonexcludable. ✓

(C) Installing streetlights results in diseconomies of scale.

(D) The marginal cost of installing streetlights is zero.

(E) The marginal benefit of installing streetlights is zero.

109. A perfectly competitive market produces the socially efficient level of output when the marginal social benefit of the last unit of output produced is

(A) equal to the marginal social cost ✓

(B) less than the marginal social cost

(C) zero

(D) greater than the total producer surplus

(E) equal to the total producer surplus

110. If the government regulates a natural monopolist to produce the allocatively efficient level of output, it will require the monopolist to set a price that is

(A) equal to its marginal cost and grant a subsidy to cover the loss ✓

(B) equal to its average total cost and levy a tax on the excess profit

(C) greater than its marginal cost and levy a tax on the excess profit

(D) greater than its marginal cost but that minimizes the deadweight loss

(E) greater than its average total cost but that minimizes the deadweight loss

111. If the production of a good generates a positive externality, the government can increase allocative efficiency by

(A) taxing the producer of the good

(B) subsidizing the producer of the good ✓

(C) prosecuting firms that produce the good without proper permits

(D) setting a price ceiling to encourage production of the good

(E) setting a price floor to discourage production of the good

112. If positive externalities exist in the market for flu shots, which of the following is true?

(A) Taxing flu shots will lead to the socially efficient level of output.

(B) Subsidizing flu shots will lead to the socially efficient level of output. ✓

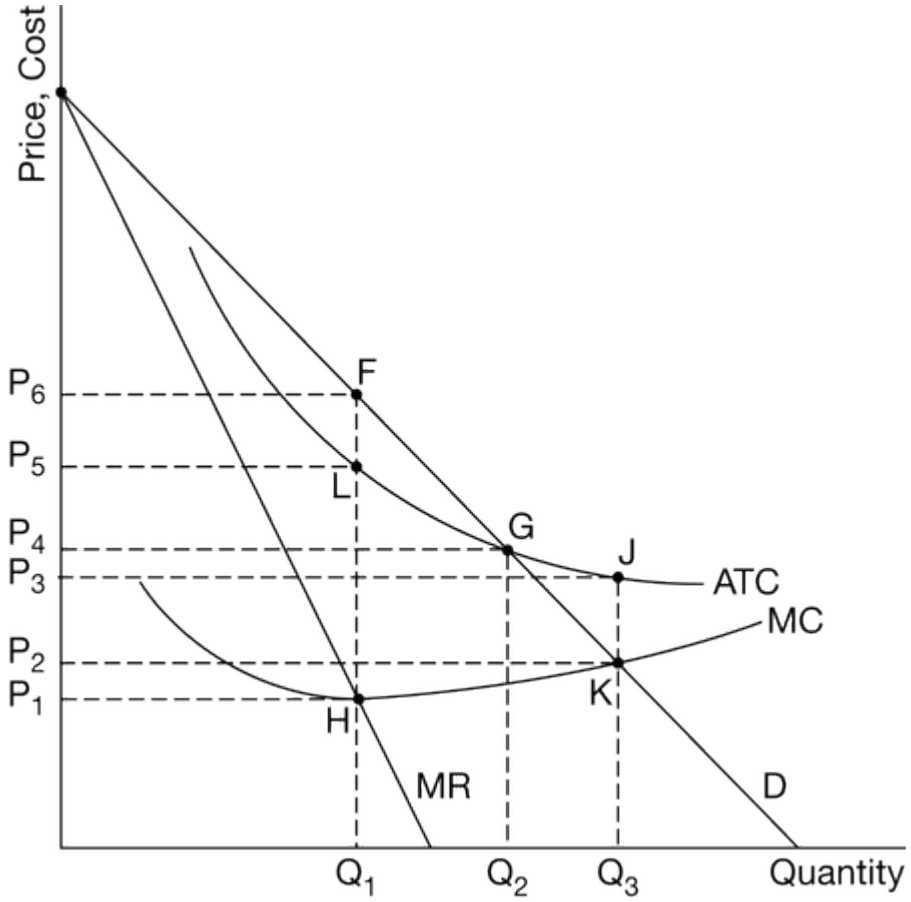
(C) The firm making the flu shots is charging too low a price to reach the socially efficient level of output.

(D) The firm making the flu shots is producing where marginal social cost equals marginal social benefit.

(E) The firm making the flu shots is producing the socially efficient quantity if the market for flu shots is perfectly competitive.

j

113.



The graph above shows the price and cost condition for a natural monopoly. The amount of lump-sum subsidy required to regulate the monopoly to produce the allocatively efficient quantity is given by the area

(A) P_5P_6FL

(B) P_1P_5LH

(C) P_1P_6FH

(D) P_2P_3JK ✓

(E) GQ_2Q_3J

114. Which of the following government actions can correct the inefficiency caused by the existence of a monopoly?

(A) Granting a per-unit subsidy on the monopolist's output ✓

(B) Granting an annual lump-sum subsidy to the monopolist

(C) Imposing a per-unit tax on the monopolist's output

(D) Imposing a price floor on the monopolist

(E) Limiting the monopolist's production through regulation

j

115. If the production of a good results in a positive externality, the government might be able to improve economic efficiency in this market by

(A) eliminating private production of the good
(B) imposing a tax on private producers
(C) promoting the export of the surplus output
(D) initiating antitrust action
(E) granting a subsidy to private producers ✓

116. Which of the following will cause an unregulated monopolist to produce a more allocatively efficient level of output?

(A) A tax based on the amount of profits
(B) A tax that does not change as output increases
(C) A tax that increases as output increases
(D) A subsidy that increases as output increases ✓
(E) A subsidy that does not change as output increases

117. In a perfectly competitive market for a good with a downward sloping demand curve and an upward sloping supply curve, the marginal social benefit is greater than the marginal social cost at the market equilibrium quantity. The government imposition of a new per-unit tax on the production of the good would

(A) have no effect on the price of the good
(B) increase consumer surplus
(C) increase the deadweight loss ✓
(D) increase producer surplus
(E) increase the quantity sold of the good

118. Assume that under new environmental regulations, tire companies have to pay taxes based on how much pollution is created when producing each tire. The price paid by consumers and the quantity of tires sold will most likely change in which of the following ways?

j

(A)

Price	Quantity
Increase	Decrease

✓

(B)

Price	Quantity
Increase	Increase

(C)

Price	Quantity
Decrease	Increase

(D)

Price	Quantity
Decrease	Decrease

(E)

Price	**Quantity**
No change	No change

119. Which of the following is a government policy that is intended to address a market failure?

(A) Taxing the use of toxic pesticides by farmers ✓

(B) Fining firms that outsource jobs to lower labor costs

(C) Subsidizing corn farmers who face increasing production costs

(D) Taxing short-run profits in competitive markets

(E) Subsidizing entry of firms into a market with an existing natural monopoly

120. Suppose that at the current output level the marginal social cost of producing a good is greater than its marginal private cost, and that the marginal social benefit associated with production of the good is equal to its marginal private benefit. Which of the following government actions would most likely increase efficiency?

j

(A) Taxing the production of the good ✓

(B) Taxing the production of substitute goods

(C) Giving tax rebates to people who purchase the good

(D) Subsidizing production of complementary goods

(E) Subsidizing consumption of the good

121. Imposing taxes that increase as a firm's pollution increases is often recommended by economists as a means to reduce pollution. The reason for this recommendation is that such taxes would likely

(A) eliminate pollution completely

(B) encourage firms to use the most efficient method to reduce pollution ✓

(C) increase the government's revenues

(D) encourage firms to increase production

(E) be paid out of firm's profits and not paid for by higher consumer prices

122. In which of the following cases is the government's action appropriate for reducing inefficiency?

(A) Taxation of the output of a chocolate factory that emits an aroma tha residents of the city enjoy

(B) Regulation that reduces the output of a monopoly

(C) A lump-sum tax on a monopolist

(D) A subsidy for the consumption of a good produced by a plant that emits a pollutant as a by-product

(E) A toll on a congested bridge ✓

123. A Lorenz curve can be used to

(A) show the historical pattern of production

(B) forecast production costs

(C) show inequality in the income distribution ✓

(D) show economies and diseconomies of scale

(E) show the shape of the long-run supply curve

124. Assume that many boats have free and open access to fishing in the waters of a country. Which of the following statements is true?

(A) With the availability of fish for all consumers, there is a positive externality; therefore, governments need to encourage greater use of the common areas with more production and increased consumption.

(B) Over time, fishing operations will voluntarily leave the market as a result of increased competition.

(C) There will be a tendency for fishing operations to overfish, reduce the stock of fish, and limit the future availability of fish for succeeding generations. ✓

(D) The waters of a country are a rare example of a resource that is not scarce. Therefore, standard economic analysis does not apply.

(E) The advantage of allowing free and open access to fishing is to limit the harm from a negative externality where too few fish are currently caught.

j

125. The Lorenz curve is used to show which of the following?

(A) The total income generated from all activities

(B) The degree of inequality in the distribution of income within a country ✓

(C) The progressivity of the income-tax structure within a country

(D) The extent of wage differences among workers in similar occupations

(E) The change in the poverty rate within a country over time

126. A society that wishes to achieve greater income equality is most likely to have which of the following?

(A) A regressive income tax system and high estate and gift taxes

(B) A regressive income tax system and low estate and gift taxes

(C) A progressive income tax system and high estate and gift taxes ✓

(D) A progressive income tax system and low estate and gift taxes

(E) A proportional income tax system and high estate and gift taxes

127. If the production of good X creates a positive externality, then from society's perspective, the industry that produces good X tends to produce

(A) less than the socially optimal amount of good X ✓

(B) greater than the socially optimal amount of good X

(C) the socially optimal amount of good X

(D) a surplus of good X, unless subsidized

(E) a shortage of good X, unless taxed

128. One justification for government regulation of a monopoly is that the unregulated monopoly

(A) earns a normal profit

(B) pays its workers a lower wage than if the market were competitive

(C) has a very elastic demand curve

(D) charges a price higher than a competitive market price ✓

(E) sells too much of the product

129. Which of the following explains why free-riding can result in a market failure?

(A) More than the socially optimal quantity is produced and consumed.

(B) The socially optimal quantity is produced but less than the socially optimal quantity is consumed.

(C) Private producers of nonexcludable goods are unable to charge everyone who consumes the good. ✓

(D) There is a market surplus of the good.

(E) There is no consumer surplus derived from the good.

j

130. Public goods are typically provided by the government, because private markets tend to

(A) produce them at higher cost

(B) produce less than the socially optimum quantity ✓

(C) produce more than the socially optimum quantity

(D) charge a monopoly price that is greater than the marginal social cost

(E) charge a monopoly price that is less than the marginal social cost

131. A perfectly competitive manufacturing industry pollutes public water in its production process, leaving the water unsuitable for use by the surrounding communities. At the market equilibrium output level, which of the following is true?

(A) Marginal private cost exceeds marginal social cost.

(B) Marginal private cost exceeds marginal private benefit.

(C) Marginal social cost exceeds marginal social benefit. ✓

(D) The market equilibrium output is equal to the socially efficient output.

(E) The market equilibrium output is less than the socially efficient output.