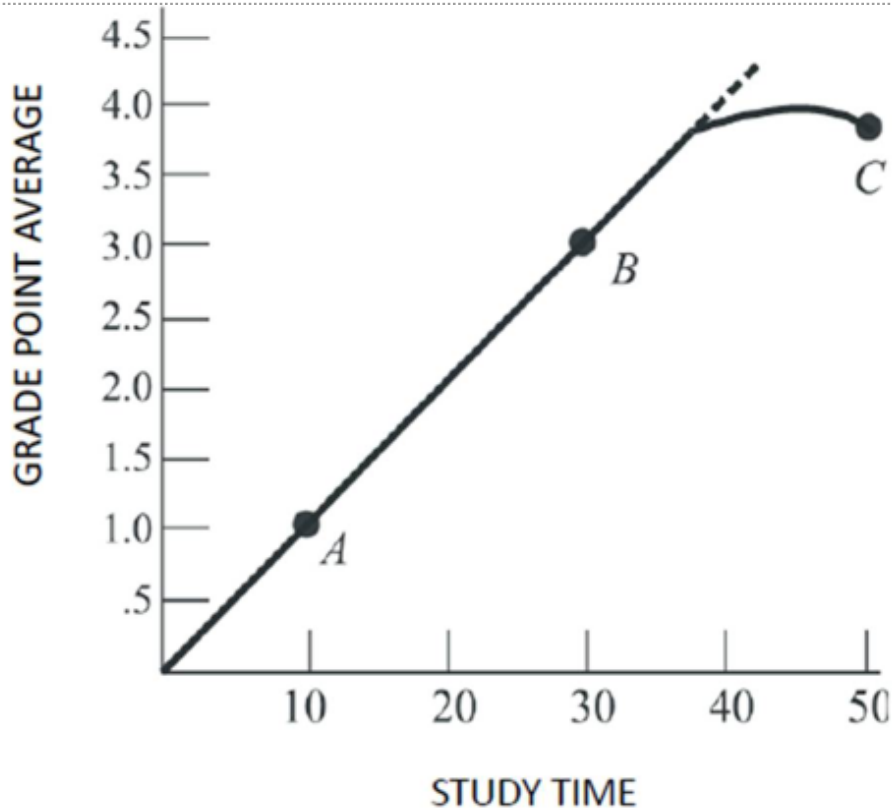


1.

award:  
10.00  
points

**Figure 1.8**  
**Relating Grades and Hours Studied**

Refer to Figure 1.8. If the university decides to lower grading standards, then

- This curve will shift rightward.
- This curve will pivot up and to the left.
- The curve will begin to bend downward at an earlier point.
- We will slide up the curve from point B to point C.

We would expect grades to be higher with less study time required, all else equal.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-01 How scarcity creates opportunity costs.

2.

award:  
**10.00**  
**points**

Greater regulation to correct the imbalances in the economy, as well government intervention to maintain full employment, was associated primarily with the work of

- John Maynard Keynes.  
 Adam Smith.  
 Karl Marx.  
 Ronald Reagan.

This forms the basis of the Keynesian school of economics.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-04 How market and government approaches to economic problems differ.

---

3.

award:  
**10.00**  
**points**

Economic growth would best be represented by a

- Shift outward of the production possibilities curve.  
 Shift inward of the production possibilities curve.  
 Movement from inside the production possibilities curve to a point on the production possibilities curve.  
 Movement from the production possibilities curve to a point inside the production possibilities curve.

Economic growth allows more of both goods.

---

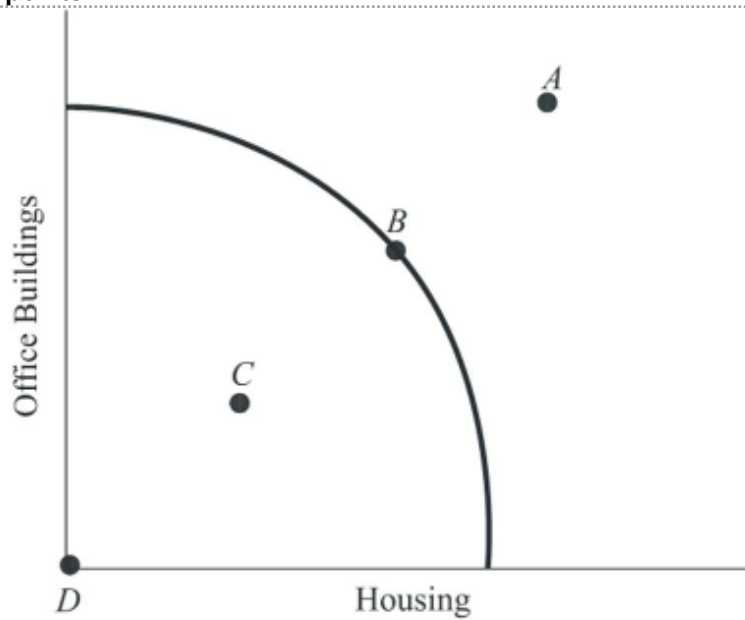
**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-02 What the production-possibilities curve represents.

---

4.

award:  
10.00  
points

**Figure 1.1**  
**Production Possibilities Curve**

At which point is society employing some of its available technology but not all of it? (See Figure 1.1.)

- A.  
 B.  
→  C.  
 D.

We could produce more by using the resources we have more efficiently.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-02 What the production-possibilities curve represents.

5.

award:  
10.00  
points

Which of the following has occurred when government directives do not produce better economic outcomes?

- Government failure.
- Market failure.
- Macroeconomic failure.
- Scarcity.

Government failure occurs when government action ends up making the market outcomes worse, not better.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 How market and government approaches to economic problems differ.

6.

award:  
10.00  
pointsWith respect to factors of production, which of the following statements is *not* true?

- Factors of production are also known as resources.
- In order to produce any good or service, it is necessary to have factors of production.
- Factors of production include land, labor, capital, and entrepreneurship.
- Only those resources that are privately owned are counted as factors of production.

Even resources owned by governments count as factors of production.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-01 How scarcity creates opportunity costs.

7.

award:  
10.00  
points

If North Korea is currently producing at efficiency, and it proceeds to increase the size of its military, then, as long as nothing else changes, its

- Production possibilities curve will shift outward.
- Production possibilities curve will shift inward.
- Production of nonmilitary goods will increase.
- Production of nonmilitary goods will decrease.

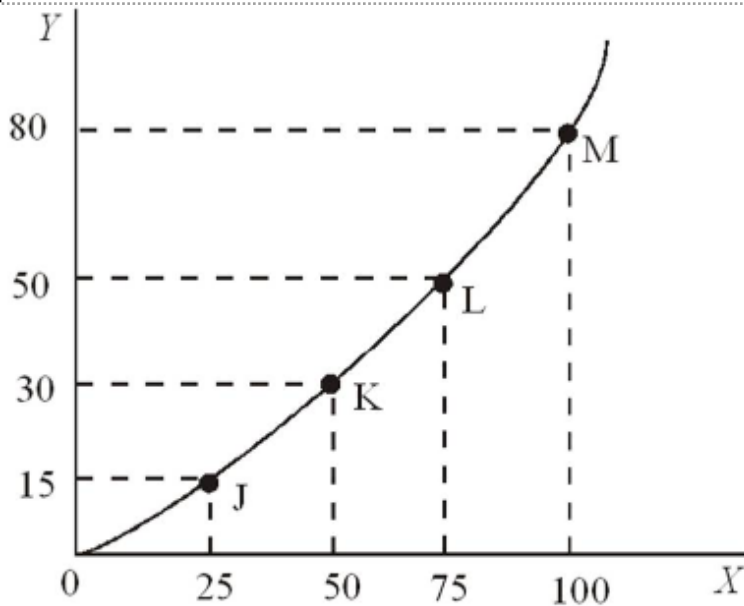
There is a trade-off: to get more of one good, other goods must be given up.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-02 What the production-possibilities curve represents.

8.

award:  
10.00  
points**Figure 1.9**

In Figure 1.9, as you move up the curve from point J toward point M, the slope

- Increases.  
 Remains constant.  
 Decreases.  
 Becomes negative.

The curve is getting steeper, so the slope is increasing.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-01 How  
scarcity creates opportunity costs.

9.

award:  
10.00  
points

The fact that there are too few resources to satisfy all our wants is attributed to

- Scarcity.  
 Greed.  
 Shortages.  
 Lack of money.

There is always an imbalance in what is desired and what is possible.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 01-01 How  
scarcity creates opportunity costs.

10. award:  
10.00  
points

Those who are interested in assessing the relative standard of living of different countries over a given time period are most likely to look at

- GDP.
- Percentage change in GDP.
- Population.
- Per capita GDP.

Comparing living standards between countries allows us to see which countries are more or less prosperous per person.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-01 The relative size of the U.S. economy.

---

11. award:  
10.00  
points

Per capita GDP will definitely rise if

- The population falls and GDP does not fall.
- The rate of economic growth falls.
- The rate of economic growth is less than the rate of population growth.
- There is a decrease in the size of the labor force.

Low population growth rates coupled with higher rates of economic growth make per capita GDP rise.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-01 The relative size of the U.S. economy.

---

12. award:  
10.00  
points

Which of the following contributes to the high productivity of American workers?

- The labor-intensive production process in the United States.
- The abundance of capital relative to labor.
- The low level of factor mobility.
- The decreasing investment in human capital.

*Ceteris paribus*, the more capital a nation has relative to labor, the more productive its workers will be.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-03 How the U.S. is able to produce so much output.

---

13. award:  
10.00  
points

Which of the following does *not* contribute to the high productivity of the U.S. economy?

- The capital stock.
- Factor mobility.
- Negative externalities.
- Technology.

Negative externalities make the internal costs inexpensive in the short run, but cause higher "fix-it" costs in the long run. Positive externalities usually created by government technology spillovers help productivity in the long run.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-03 How the U.S. is able to produce so much output.

---

14. award:  
10.00  
points

A rich country that opened its borders to trade with a poor country would cause in the long run

- More equitable distribution of income GDP for the rich country but not the poor country.
- More equitable distribution of income GDP for the poor country but not the rich country.
- More equitable distribution of income GDP for the rich country and the poor country.
- None of the choices are correct.

Open trade allows specialization in production between nations that causes cost savings, lower prices, higher employment, higher incomes, and ultimately higher standards of living for all nations. The emphases here are on higher employment in the export markets for both countries along with lower cost of purchases in the newly opened import markets.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-04 How incomes are distributed in the United States and elsewhere.

---

15. award:  
10.00  
points

Which of the following contains the two sectors whose percentage contribution to the real GDP has declined since 1900?

- Farming and manufacturing.  
 Manufacturing and exports.  
 Farming and services.  
 Services and exports.

Farming and manufacturing are less important in the overall economy today compared to the service sector.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-02 How the U.S. output mix has changed over time.

16. award:  
10.00  
points

The WHAT question can best be answered using data about which of the following?

- The distribution of output among manufacturing, services, and agricultural sectors.  
 Per capita GDP.  
 Productivity.  
 The distribution of GDP among different income quintiles.

Markets tell producers what the economy should produce.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-02 How the U.S. output mix has changed over time.

17. award:  
10.00  
points

Which of the following statements is true concerning income inequality?

- Income is equally distributed in poor countries.  
 Developed countries have greater income inequality than developing countries.  
 The government has no way to alter income inequality.  
→  The free market produces an unequal distribution of income.

Income inequality will vary depending on how active the government is in the economy.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-04 How incomes are distributed in the United States and elsewhere.



18. award:  
10.00  
points

The government establishes the rules of the game for economic transactions in order to

- Legitimize and enforce contracts.
- Discourage the production of capital.
- Discourage the ownership of property.
- Encourage spillover costs.

Without guarantees from both buyer and seller as established in contracts, many market activities would cease to exist, thereby harming the economy.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-03 How the U.S. is able to produce so much output.

19. award:  
10.00  
points

The role of the government in establishing how private business can operate includes all of the following except

- Providing a legal framework.
- Providing raw materials to business.
- Protecting the environment.
- Protecting consumers from defective products.

The government plays important roles to safeguard the rights of individuals and society at large.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-03 How the U.S. is able to produce so much output.

20. award:  
10.00  
points

A rightward shift of the market demand curve for MP3 players, *ceteris paribus*, causes equilibrium

- Price to increase and equilibrium quantity to decrease.
- Price to decrease and equilibrium quantity to decrease.
- Price to increase and equilibrium quantity to increase.
- Price to decrease and equilibrium quantity to increase.

An increase in demand causes equilibrium price and equilibrium quantity to increase.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 03-04 What causes market prices to change.

21. award:  
10.00  
points

If a price is below equilibrium,

- A shortage will cause the price to fall and the quantity supplied to decrease.
- A shortage will cause the price to rise and the quantity supplied to increase.
- A surplus will cause the price to fall and the quantity supplied to decrease.
- A surplus will cause the price to fall and the quantity supplied to increase.

A price below equilibrium causes a shortage. This puts upward pressure on both price and quantity.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-04 What causes market prices to change.

---

22. award:  
10.00  
points

If a price is above equilibrium,

- A shortage will cause the price to fall and the quantity supplied to decrease.
- A shortage will cause the price to rise and the quantity supplied to increase.
- A surplus will cause the price to fall and the quantity supplied to decrease.
- A surplus will cause the price to fall and the quantity supplied to increase.

A price above equilibrium causes a surplus. This puts downward pressure on both price and quantity.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-04 What causes market prices to change.

---

23. award:  
10.00  
points

Which of the following is *not* held constant along a given supply curve for a good?

- The cost of factors of production.
- Price.
- Technology.
- Taxes.

If the price of a product is the only variable changing, then we can track changes in quantity supplied along the supply curve.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-02 The nature and determinants of market supply.

---

24.

award:  
10.00  
points

---

Which of the following is a market transaction?

- A stock increases in value over the 30 years that it is owned.
- A college student purchases a laptop computer.
- Weather destroys a farmer's crops, leaving the farmer unable to buy groceries.
- A radio station changes its programming from classical to rock.

A market transaction involves an exchange of either barter or currency for goods or resources.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-03 How market prices and quantities are established.

---

25.

award:  
10.00  
points

---

Jessie's demand schedule for candy bars indicates

- Her opportunity cost of buying candy bars.
- How much she likes candy bars.
- How many candy bars she will actually buy.
- Why she likes candy bars.

A demand schedule is a table showing the quantities of a good a consumer is willing and able to buy at alternative prices. It reflects the value of her or his opportunity cost of buying a good, such as a candy bar, at each price.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-01 The nature and determinants of market demand.

---

26.

award:  
10.00  
points

---

A decrease in the price of electricity can best be explained by

- A decrease in the population.
- Abnormally cold winters and hot summers.
- The increased use of electronic devices such as computers.
- A growing economy.

A decrease in price can be caused by a decrease in demand or an increase in supply. A decrease in population will cause a decrease in demand.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-04 What causes market prices to change.

---

27. award:  
10.00  
points

*Ceteris paribus*, for a farmer, corn and wheat are

- Substitutes in production.
- Complements in production; by-products.
- Unrelated in a farmer's decision.
- None of the choices are correct.

A farmer can plant either corn or wheat in the same spot but not both. These are substitutes in production.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-02 The nature and determinants of market supply.

28. award:  
10.00  
points

Which of the following is purchased in a factor market?

- A bag of jellybeans.
- National defense.
- The labor of a state university professor.
- A motorized scooter used for commuting by a student.

A factor market is where the factors of production, in this case labor, are bought and sold.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-03 How market prices and quantities are established.

29. award:  
10.00  
points

Which of the following is *not* held constant along a given demand curve for a good?

- Price.
- Consumer's income.
- The price of substitutes.
- Consumer tastes.

The demand curve reflects the quantity demanded at different price levels, which therefore cannot be held constant.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 03-01 The nature and determinants of market demand.

30. award:  
10.00  
points

Government intervention in the market

- Always involves an opportunity cost.
- Never involves an opportunity cost because only market activities result in other goods and services being given up.
- Does not involve an opportunity cost if market outcomes are improved.
- Results in the free-rider dilemma.

Only if you move along the production possibilities curve, or you move inside the curve or a government action shifts the curve inward, is there an opportunity cost of a government action. If a government action shifts the curve outward or moves the economy from an interior point to one on the curve in a northeastern direction, then there is no sacrifice or opportunity cost.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-04 The meaning of government failure.

31. award:  
10.00  
points

From 1990 to 2010, the public sector share of total output

- Trended upward to 2000 and then downward to 2010.
- Trended upward through 2010.
- Trended downward to 2000 and then upward to 2010.
- Trended downward to 2010.

From 1990 to 2010, the public sector share of total output trended downward to 2000 and then upward to 2010.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-02 How the public sector has grown.

32. award:  
10.00  
points

Which of the following is the government most likely to discourage because of the existence of externalities?

- All goods and services produced by monopolies.
- Cars that create an excessive amount of exhaust fumes.
- Thermal pollution from a power plant that improves fishing downstream.
- Fatty foods that lead to heart disease.

Cars that create an excessive amount of exhaust fumes will most likely have the most external costs.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-01 The nature and causes of market failure.

33. award:  
10.00  
points

Which of the following is a merit good?

- Cigarettes.
- Food.
- Local telephone service.
- A computer operating system.

A merit good is a good or service that society deems everyone is entitled to some minimal quantity of, such as food.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-01 The nature and causes of market failure.

34. award:  
10.00  
points

Which of the following is the best example of a government effort to address market failure in relation to the FOR WHOM to produce question?

- Antitrust policy.
- Regulations reducing pollution.
- Transfer payments.
- The production of goods that allow free riders.

The tax-and-transfer system is the principal mechanism for redistributing incomes.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-01 The nature and causes of market failure.

35. award:  
10.00  
points

Government failure will likely arise if

- There are no valuation problems.
- Public services have reliable market prices.
- Government officials attempt to maximize their own utility.
- The free-rider problem occurs.

If the agendas of public officials give higher priority to personal advancement than to the needs of the public, the probability of attaining the socially optimal mix of output declines.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-04 The meaning of government failure.

36. award:  
10.00  
points

Which of the following is a merit good?

- Local telephone service.
- Electricity.
- Health care.
- Automobiles.

A merit good is a good or service that society deems everyone is entitled to some minimal quantity of, such as health care.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-01 The nature and causes of market failure.

37. award:  
10.00  
points

Which of the following is an example of a progressive tax?

- Social Security payroll tax.
- A local sales tax.
- The federal income tax.
- An excise tax.

The federal income tax is progressive because people with high incomes pay a larger fraction of their income in taxes.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-03 Which taxes finance state; local; and federal governments.

38. award:  
10.00  
points

The market

- On its own may not always provide the optimal mix of goods and services.
- Always provides the optimal mix of goods and services.
- Always provides a better mix of goods and services without government intervention than it does with government intervention.
- May not produce the optimal mix of output, which is known as government failure.

Market forces might produce a mix of output different than the optimal mix.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 04-01 The nature and causes of market failure.

39. award:  
10.00  
points

---

Maximum utility is achieved when

- Total revenue is the greatest.
- The price elasticity of demand is 1.0.
- Marginal utility is zero.
- Total utility equals marginal utility.

Without budget constraints, a consumer can add to her or his utility by consuming goods with positive marginal utility. Therefore utility will be maximized when marginal utility reaches zero.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 05-04 How consumers maximize utility.

---

40. award:  
10.00  
points

---

If a successful advertising campaign increases brand loyalty, the

- Supply of the advertised good will become less elastic.
- Demand for the advertised good will become less elastic.
- Supply of substitutes for the advertised good will increase.
- Total level of consumption will decrease.

Increasing brand loyalty will reduce consumer responsiveness to price increases, which allows a firm to increase prices and revenues.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 05-04 How consumers maximize utility.

---



41. award: 10.00 points

Josh is eating pizza at his favorite Italian restaurant. Below is his utility from t consumption:

	Total Utility	Marginal Utility
First slice of pizza	20	20
Second slice of pizza	39	19
Third slice of pizza	—	15
Fourth slice of pizza	59	—

Table 19.1

Refer to Table 19.1. What is Josh's total utility from consuming the third slice of pizza?

- 20 utils.
- 54 utils.
- 5 utils.
- 0 utils.

Total utility is the sum of all of the marginal utilities. If you add the 15 marginal utility units that Josh received from consuming the third slice of pizza to the total utility units of 39 he enjoyed from the second slice,  $39 + 15 = 54$ .

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 05-01 Why demand curves are downward sloping.

42. award: 10.00 points

Sociopsychiatric explanations of consumer behavior include the

- Desire for ego and status.
- Level of income.
- Level of wealth.
- Prices of other goods.

Sociologists offer explanations for our consumption behavior—not just to "keep up with the Joneses" but to surpass them.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 05-01 Why demand curves are downward sloping.

43. award:  
10.00  
points

The law of diminishing marginal utility suggests that

- People are willing to buy additional quantities of a good only if its price falls.
- People will substitute lower-priced goods for more expensive goods, *ceteris paribus*.
- Price and quantity demanded are directly related.
- As marginal utility decreases, the willingness to pay increases.

The more marginal utility a product delivers, the more a consumer will be willing to pay for it. Marginal utility diminishes as increasing quantities of a product are consumed; therefore consumers are willing to pay progressively less for additional quantities of a product.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 05-01 Why demand curves are downward sloping.

---

44. award:  
10.00  
points

Sellers can gain profits from price discrimination because

- Charging different prices based on willingness to pay can increase revenues.
- Total expenses are less with price discrimination.
- Total revenues are maximized when all buyers pay the same price.
- Different prices charged to different customers can lower total revenue.

If a seller can charge the maximum price each individual is willing to pay, it can raise its total revenues. Revenue is price times quantity.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 05-03 The meaning and use of price discrimination.

---

45.

award:  
**10.00**  
**points**

---

The \_\_\_\_\_ of the demand curve corresponds to the idea that the marginal utility for the first few goods is \_\_\_\_\_.

- top; lower
- bottom; lower
- top; higher
- bottom; higher

The first few goods consumed have a higher marginal utility. This corresponds to the top of the demand curve, where consumers are willing to pay a higher price if a good has a higher marginal utility.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 05-01 Why demand curves are downward sloping.

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46.

award:  
10.00  
points

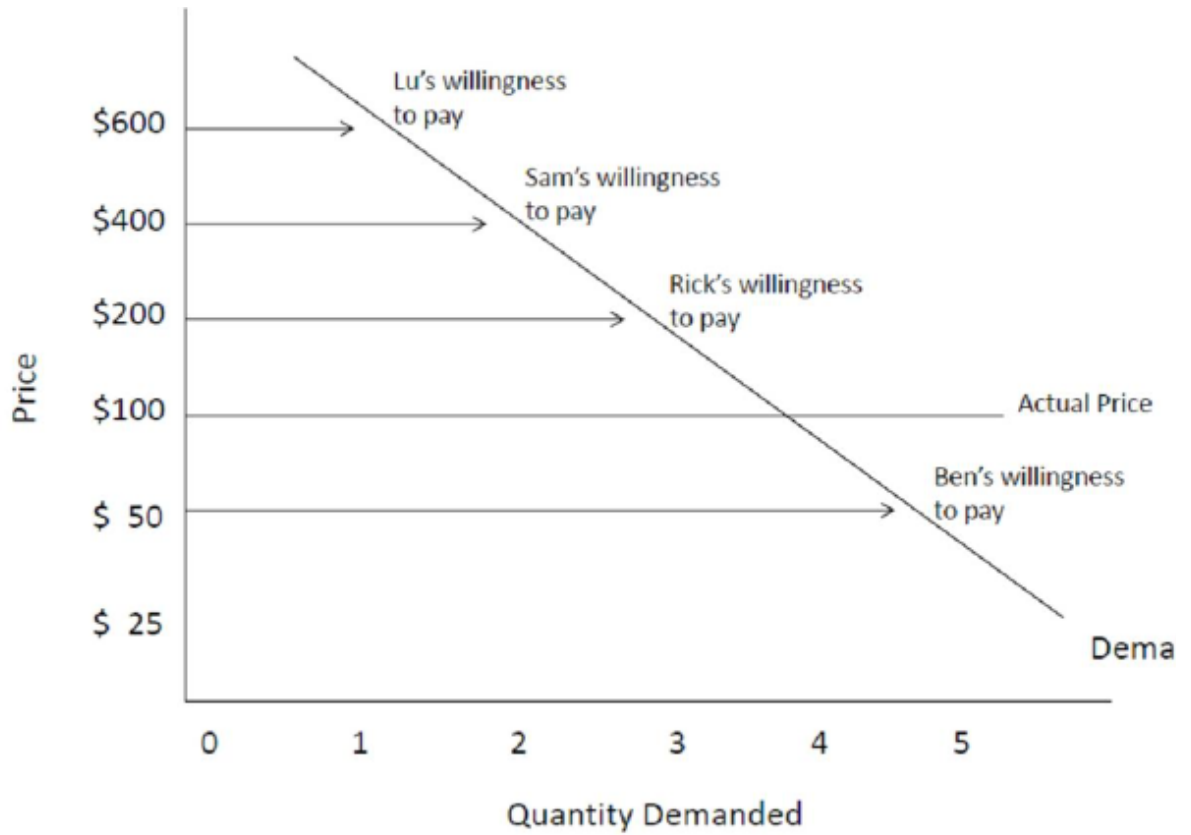


Figure 19.1

Refer to Figure 19.1. The total consumer surplus in this market is equal to

- \$950.
- \$900.
- \$850.
- \$800.

The total consumer surplus is the total of the differences between each individual's maximum willingness to pay and the actual price. The total for the three consumers is  $(\$600 - \$100) + (\$400 - \$100) + (\$200 - \$100) = \$900$ .

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 05-02 The nature and source of consumer surplus.

47. award:  
10.00  
points

*Ceteris paribus*, as the number of substitutes for a good increases, the

- Price elasticity of demand should become smaller.
- Price elasticity of demand should become larger.
- Cross-price elasticity of demand should become negative.
- Income elasticity of demand should become negative.

The greater the availability of substitutes, the higher the price elasticity of demand. For example, the high elasticity of demand for fish reflects the fact that consumers can always eat chicken, beef, or pork if fish prices rise.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-01 How to compute price elasticity of demand.

---

48. award:  
10.00  
points

Income elasticity measures the

- Responsiveness of quantity demanded for one good to a percentage change in price of another good.
- Responsiveness of quantity demanded to a percentage change in income.
- Way in which consumers switch from one product to another when price rises.
- Percentage change in quantity demanded given a percentage change in wealth.

Income elasticity measures how responsive quantity demanded is to a change in incomes.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-04 What the income elasticity of demand tells us.

---

49. award:  
10.00  
points

A price change will have no effect on total revenue if demand is

- Elastic.
- Unitary.
- Inelastic.
- Perfectly elastic.

A price hike has no effect on total revenue if the price elasticity of demand is equal to 1.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-02 The relationships between price changes; price elasticity; and total revenue.

50. award:  
10.00  
points

Supply is very inelastic when

- The quantity supplied changes little when the price increases.
- The quantity supplied changes a lot when price increases.
- The quantity supplied does not change at all when price increases.
- The quantity supplied changes only when demand changes.

Inelastic supply means that the quantity supplied by producers will change little when the price increases. For example, if natural gas prices rise, it may take producers a while to produce more if labor or equipment is scarce.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-05 What the elasticity of supply measures.

51. award:  
10.00  
points

If demand is perfectly elastic,

- The demand curve is vertical.
- The demand curve is very steep.
- The demand curve is horizontal.
- The demand curve has a zero slope.

A perfectly elastic demand curve is horizontal, which means that any increase in price causes quantity demanded to fall to zero.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-01 How to compute price elasticity of demand.

52.

award:  
10.00  
points

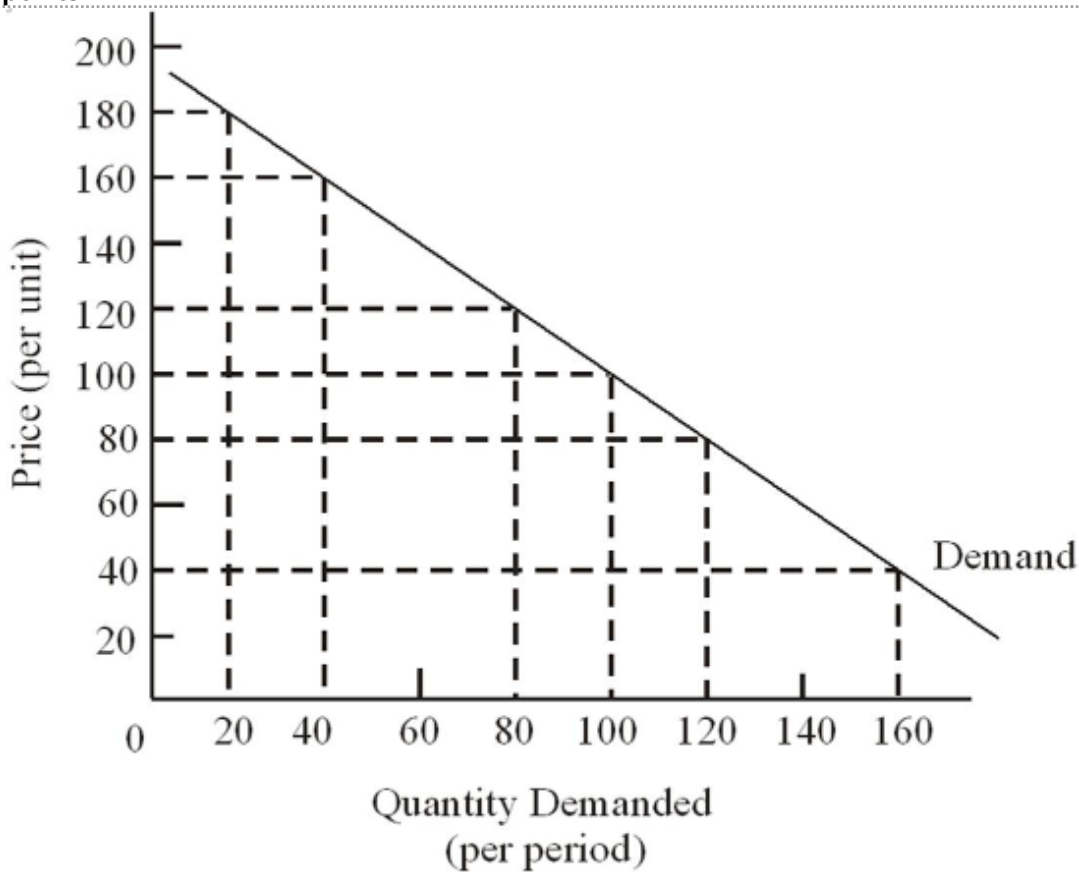


Figure 20.1

In the \$80 to \$40 price range in Figure 20.1, demand is

- Perfectly price-elastic.
- Price-inelastic.
- Unitary elastic.
- Price-elastic.

At price levels less than \$100, a decrease in the price causes revenue to decrease, which implies that demand is inelastic.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 06-02 The relationships between price changes; price elasticity; and total revenue.

**53.**award:  
**10.00**  
**points**

---

The formula for cross-price elasticity is

- The percentage change in the quantity demanded for one good divided by the percentage change in income.
- The percentage change in the quantity demanded for one good divided by the percentage change in the price of another good.
- The percentage change in the price of one good divided by the percentage change in the quantity demanded of another good.
- The percentage change in the quantity demanded divided by the average change in price.

The basic cross-price elasticity formula is the percentage change in the quantity demanded for good A divided by the percentage change in the price of good B.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-03 What the cross-price elasticity of demand measures.

---



54.

award:  
10.00  
points

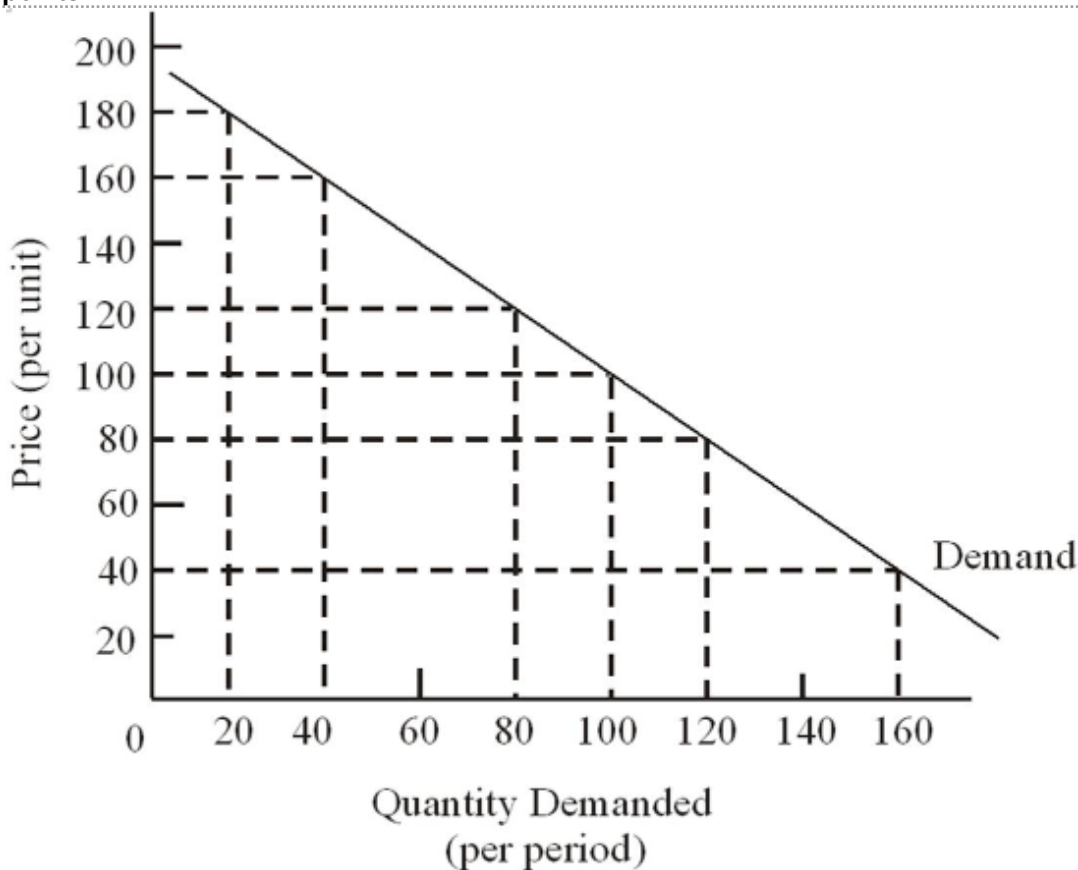


Figure 20.1

In Figure 20.1, at what price is the elasticity of demand unitary?

- \$40.
- \$100.
- \$160.
- \$200.

At a price levels less than \$100, a decrease in the price causes revenue to decrease, which implies that demand is inelastic. At price levels greater than \$100, a decrease in the price causes revenue to increase, which implies that demand is elastic. Therefore, demand must be unitary elastic at a price of \$100.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 06-02 The relationships between price changes; price elasticity; and total revenue.

55. award:  
10.00  
points

Assume apples and oranges are substitutes. Suppose apple growers launch a successful advertising campaign that convinces consumers apples are a better product. As a result the cross-price elasticity of apples and oranges will become

- Less negative (move closer to zero).
- More negative.
- Less positive (move closer to zero).
- More positive.

If two goods are substitutes, the cross-price elasticity is positive. However, if the successful advertising campaign convinces consumers apples are a better product, a change in the price of oranges will not have much impact on the demand for apples.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 06-03 What the cross-price elasticity of demand measures.

---

56. award:  
10.00  
points

The average variable cost curve slopes upward with a higher rate of output in the short run because of

- The effect of diminishing returns.
- The shape of the average fixed cost curve.
- Diseconomies of scale.
- Implicit but not explicit costs.

At some point the average variable cost rises because of diminishing returns in the production process.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

---

57. award:  
10.00  
points

Which of the following costs do *not* change when output changes in the short run?

- Average variable costs.
- Variable costs.
- Average fixed costs.
- Fixed costs.

Fixed costs such as the cost of the basic plants and equipment do not vary with the rate of output.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

---

58. award:  
10.00  
points

A U-shaped average total cost curve implies

- First diminishing returns, and then increasing returns.
- First marginal cost below average total cost, and then marginal cost above average total cost.
- That total costs are at a minimum at the minimum of the average cost curve.
- A linear total cost curve.

So long as the marginal cost of producing one more unit is less than the previous average cost, average cost must fall. Average total costs must increase whenever marginal cost exceeds average cost.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

---

59.

award:  
10.00  
points

Output (units per day)	0	10	20	30
Total cost (dollars per day)	\$40	\$54	\$62	\$80

**Table 21.2**

Average fixed cost at 20 units of output in Table 21.2 is

- \$1.00.  
 \$2.00.  
 \$2.50.  
 \$4.00.

Average fixed cost is equal to fixed cost divided by quantity. Fixed cost of 40 (because total cost is \$40 at 0 units of output) divided by 20 is equal to \$2.00.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

60.

award:  
10.00  
points

In the short run, which of the following is most likely a variable cost?

- Contractual lease payments.  
 Labor and raw materials costs.  
 Property taxes.  
 Interest payments on borrowed funds.

Variable costs are the costs of production that change when the rate of output is altered, such as labor or material costs.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

61.

award:  
10.00  
points

Output (Units per Day)	Total Cost (Dollars per Day)
0	16
1	30
2	42
3	58
4	78

**Table 21.4**

The marginal cost of the fourth unit of output in Table 21.4 is

- \$4.00.  
 \$20.00.  
 \$16.00.  
 \$19.50.

Marginal cost is equal to the change in total cost ( $\$78 - \$58$ ) divided by the change in quantity ( $4 - 3$ ), which is \$20.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-03 How the various measures of cost relate to each other.

62.

award:  
10.00  
points

Which of the following is the best explanation of why the law of diminishing returns does *not* apply in the long run?

- In the long run, firms can increase the availability of space and equipment to keep up with the increase in variable inputs.  
 The MPP does not change in the long run.  
 In the long run, firms have enough time to find the most qualified workers.  
 All factors of production are fixed in the long run.

The problems of crowded facilities apply to most production processes in the short run because of fixed resources. In the long run, all resources can be changed.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 07-02 Why the law of diminishing returns applies to production processes.

63. award:  
10.00  
points

A perfectly competitive firm will maximize profits by choosing an output level where

- Price is greater than marginal cost.
- Price equals marginal cost.
- Price equals total cost.
- Price is greater than total cost.

A competitive firm maximizes total profit at the output rate where MC is equal to price (which is the same as MR in perfect competition). If MC is less than price, the firm can increase profits by producing more. If MC exceeds price, the firm should reduce output.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-02 The characteristics of perfectly competitive firms.

---

64. award:  
10.00  
points

Competitive firms *cannot* individually affect market price because

- There is an infinite demand for their goods.
- Demand is perfectly inelastic for their goods.
- Their individual production is insignificant relative to the production of the industry.
- The government exercises control over the market power of competitive firms.

An individual firm in a perfectly competitive market is so small relative to the entire market that it confronts a horizontal demand curve (perfectly elastic demand) for its output. If it changes the quantity of output, it does not affect the market price.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-01 How profits are computed.

---

65.

award:  
10.00  
points

Assume an apple farmer incurs the following costs and revenues:	
Fertilizer:	\$200
Seeds:	\$75
Water:	\$250
Wages:	\$750
Property taxes:	\$600
Interest payments on borrowed funds:	\$1,200
Sales of apples:	\$4,000

**Table 22.1**

The accounting profit is equal to

- \$925.  
 \$1,525.  
 \$2,125.  
 \$4,000.

Accounting profit is equal to revenue (\$4,000) minus explicit costs ( $\$200 + \$75 + \$250 + \$750 + \$600 + \$1,200$ ), which is \$925.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-01 How profits are computed.

66. award:  
10.00  
points

Businesses that fail to account for implicit costs, like the strawberry farmer, Hiroshi Fujishige, who failed to consider the enormous opportunity of selling his property to Disneyland, will

- Go out of business immediately.
- Make higher-than-normal profits.
- Make more money when they shut down.
- Have to increase revenues in order to stay in business.

Fujishige could have made even more money if he had stopped growing strawberries.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-03 How a competitive firm maximizes profit.

---

67. award:  
10.00  
points

The \$600 paid in property taxes counts as

- An implicit cost.
- A normal cost.
- A variable cost.
- An explicit cost.

The costs of taxes, fertilizer, seeds, water, wages, and interest are all explicit costs.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-01 How profits are computed.

---

68. award:  
10.00  
points

Fixed costs

- Increase with the level of production in the short run.
- Can be altered in the short run but not in the long run.
- Increase as we move from the short run to the long run.
- Are constant in the short run.

The short run is the period in which the quantity (and quality) of some inputs can't be changed—in other words are fixed.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-02 The characteristics of perfectly competitive firms.

---



69. award:  
10.00  
points

If a perfectly competitive firm is producing at its profit-maximizing output in the short run and fixed costs decline, the firm should

- Use less capital but increase output by hiring more labor.
- Not change output.
- Reduce output.
- Increase output.

Since fixed costs do not affect marginal costs, a change in fixed costs leaves the optimal rate of output unchanged.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-06 What shapes or shifts a firm's supply curve.

---

70. award:  
10.00  
points

A competitive firm

- Has the market power to compete effectively.
- Is large enough relative to the market to be taken into account by competitors.
- Confronts a downward-sloping firm demand curve.
- Is a price taker.

A perfectly competitive firm risks losing all of its customers, who will shop elsewhere, if it increases the price of its product above the market-established price. Therefore, it is compelled to take the market price that is determined by the interaction of supply and demand.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-01 How profits are computed.

---

71. award:  
10.00  
points

---

In making an investment decision, an entrepreneur

- Treats all costs as variable.
- Makes a shutdown decision if price is below average variable cost.
- Must take account of diminishing returns to fixed factors.
- Decides the level of output to produce.

An investment decision is the long-run decision to build, buy, or lease plants and equipment, or to enter or exit an industry. In the long run all costs are variable.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 08-05 The difference between production and investment decisions.

---

72. award:  
10.00  
points

---

In a competitive market,

- Buyers don't have market power but sellers do.
- Sellers don't have market power but buyers do.
- Neither buyers nor sellers have market power.
- Buyers and sellers both have market power.

A perfectly competitive industry has several distinguishing characteristics, including many buyers and sellers, identical products, and low entry barriers. Because of the many buyers and sellers, neither buyers nor sellers will have market power.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-01 The market characteristics of perfect competition.

---

73. award:  
10.00  
points

A firm should shut down production when

- $P < \text{minimum AVC}$ .  
  $P > \text{minimum AVC}$ .  
  $P = \text{minimum ATC}$ .  
  $P = \text{MC}$ .

A firm that shuts down will lose all its fixed costs. Therefore, a firm should shut down only if the losses from continuing production exceed fixed costs. This happens when price is less than average variable cost.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 09-03 Why long-run economic profits approach zero in competitive markets.

74. award:  
10.00  
points

In which of the following cases would a firm exit from a market?

- $P > \text{short-run ATC}$ .  
  $P < \text{short-run ATC}$ .  
  $P > \text{long-run ATC}$ .  
→   $P < \text{long-run ATC}$ .

If economic losses exist in an industry ( $P < \text{ATC}$ ), firms will want to exit. As they do, the market supply curve will shift to the left and cause the market price to increase until profits are normal.

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 09-02 How prices are established in competitive markets.

75. award:  
10.00  
points

Which of the following is characteristic of a perfectly competitive market?

- A small number of firms.
- Exit of small firms when profits are high for large firms.
- Zero economic profit in the long run.
- Marginal revenue lower than price for each firm.

A perfectly competitive industry has several distinguishing characteristics, including many firms, identical products, and low entry barriers. Because of the low entry barriers, perfectly competitive firms will earn zero economic profit in the long run.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-01 The market characteristics of perfect competition.

---

76. award:  
10.00  
points

Marginal cost pricing means that a firm

- Produces up to the output where  $P = MC$  for a given market price.
- Lowers market price to marginal cost for a given output.
- Lets marginal cost rise to the market price for a given output.
- Produces up to the output level at which  $MC = 0$  for a given market price.

The marginal cost pricing characteristic of competitive markets permits society to answer the WHAT to produce question efficiently. The amount consumers are willing to pay for a good (its price) equals its opportunity cost (marginal cost).

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-02 How prices are established in competitive markets.

---

77. award:  
10.00  
points

---

The market structure of the computer industry

- Was originally a monopoly.
- Was originally perfectly competitive.
- Has become more competitive over time.
- Has become less competitive over time.

As in other industries, the market structure of the computer industry has evolved over time. It was never a monopoly, nor was it ever perfectly competitive.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-01 The market characteristics of perfect competition.

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78. award:  
10.00  
points

---

When an athletic shoe company is producing a level of output at which price is greater than MC, from society's standpoint the company is producing too

- Much because society is giving up more to produce additional shoes than the shoes are worth.
- Much because society would be willing to give up more alternative goods in order to get additional shoes.
- Little because society is giving up more to produce additional shoes than the shoes are worth.
- Little because society would be willing to give up more alternative goods in order to get additional shoes.

High profits in a particular industry indicate that consumers want a different mix of output (more of that particular industry's goods).

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-04 How society benefits from market competition.

---

79. award:  
10.00  
points

In making an investment decision, an entrepreneur

- Makes a decision to exit if price is above marginal cost.
- Makes a short-run decision.
- Must consider only variable costs.
- Must take account of diminishing returns.

An investment decision is the long-run decision to build, buy, or lease plants and equipment, or to enter or exit an industry. Therefore, a firm should compare price to long-run costs, which are all variable.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-01 The market characteristics of perfect competition.

80. award:  
10.00  
points

The price signal the consumer gets in a competitive market

- In no way reflects opportunity cost.
- Is an accurate reflection of opportunity cost.
- Is not reliable for making choices about the allocation of resources.
- Is the result of the selfishness of individuals.

The amount consumers are willing to pay for a good (its price) equals its opportunity cost (marginal cost).

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-04 How society benefits from market competition.

81. award:  
10.00  
points

Which characteristic of competitive markets permits society to answer the WHAT to produce question efficiently?

- Marginal cost pricing.
- Average cost pricing.
- Minimum cost pricing.
- Total cost pricing.

The marginal cost pricing characteristic of competitive markets permits society to answer the WHAT to produce question efficiently. The amount consumers are willing to pay for a good (its price) equals its opportunity cost (marginal cost).

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 09-02 How prices are established in competitive markets.

82. award:  
10.00  
points

The federal government's lawsuit against AT&T was motivated in large part by

- AT&T's inefficient and inadequate R&D expenditures.
- The extension of its market power to other markets.
- Its practice of price discrimination.
- The diseconomies of scale resulting from AT&T's enormous size.

The lawsuit against American Telephone and Telegraph's (AT&T's) phone monopoly occurred because AT&T supplied 96 percent of all long-distance service and over 80 percent of local telephone service. AT&T kept long-distance charges high and compelled consumers to purchase hardware from its own subsidiary.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-01 How a monopolist sets price and output.

---

83. award:  
10.00  
points

A monopolist has market power because it

- Faces a downward-sloping demand curve for its own output.
- Can raise price as much as it wishes and not lose any customers.
- Is a price taker.
- Is regulated by the government.

A firm that faces a downward-sloping demand curve can change market prices by altering its output and therefore has market power.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-01 How a monopolist sets price and output.

---

84. award:  
10.00  
points

Which of the following is a barrier to entry in a monopoly market?

- Economic profits greater than zero for the monopolist.
- A rising long-run average total cost curve.
- A patent on a new product.
- A vertical supply curve.

Examples of barriers to entry include patents, monopoly franchises, regulation, economies of scale, and control of key inputs.

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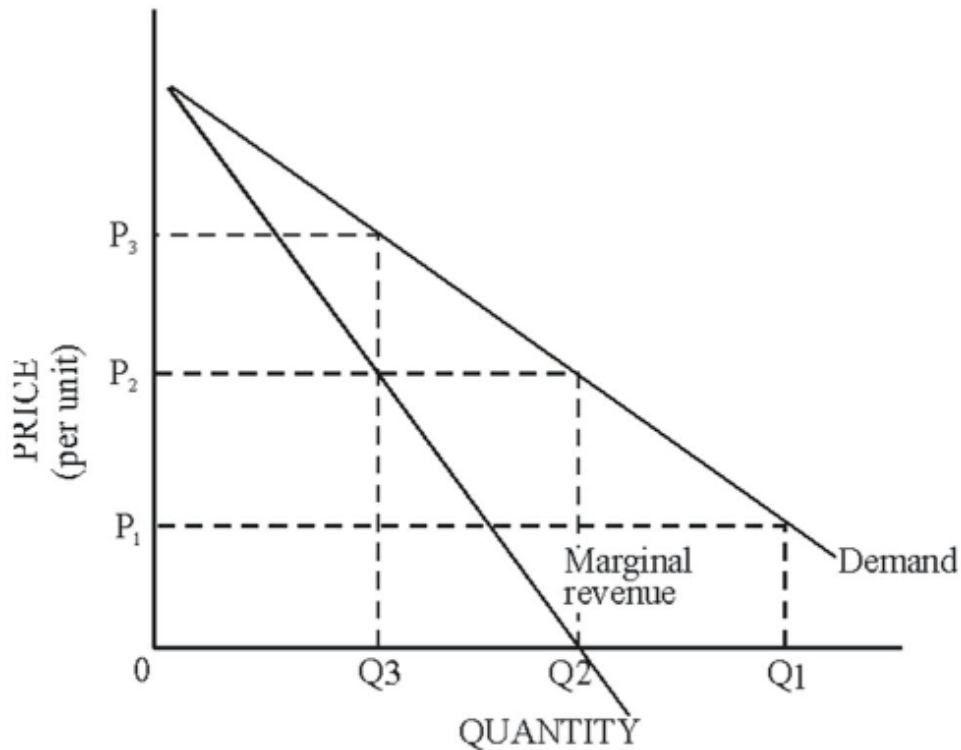
**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-02 How monopoly and competitive outcomes differ.

---

85.

award:  
10.00  
points**Figure 24.3**

Refer to Figure 24.3. Which of the following statements is true about the price elasticity of demand at price  $P_3$ ?

- The price elasticity is elastic.  
 The price elasticity is unitary.  
 The price elasticity is inelastic.  
 The price elasticity is zero.

At  $P_3$ , a firm can decrease its price and revenue will go up ( $MR > 0$ ); therefore the price elasticity of demand is elastic.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-03 The pros and cons of monopoly.



**86.**award:  
**10.00**  
**points**

---

All of the following are limitations on the market power of a monopoly *except*

- The elasticity of demand.
- The ability of a firm to control demand.
- The ability of a company to control the quantity supplied.
- The demand curve.

A monopoly can control quantity supplied, but its market power is limited by the demand the company faces. A monopoly will have less market power with more elastic demand for the good.

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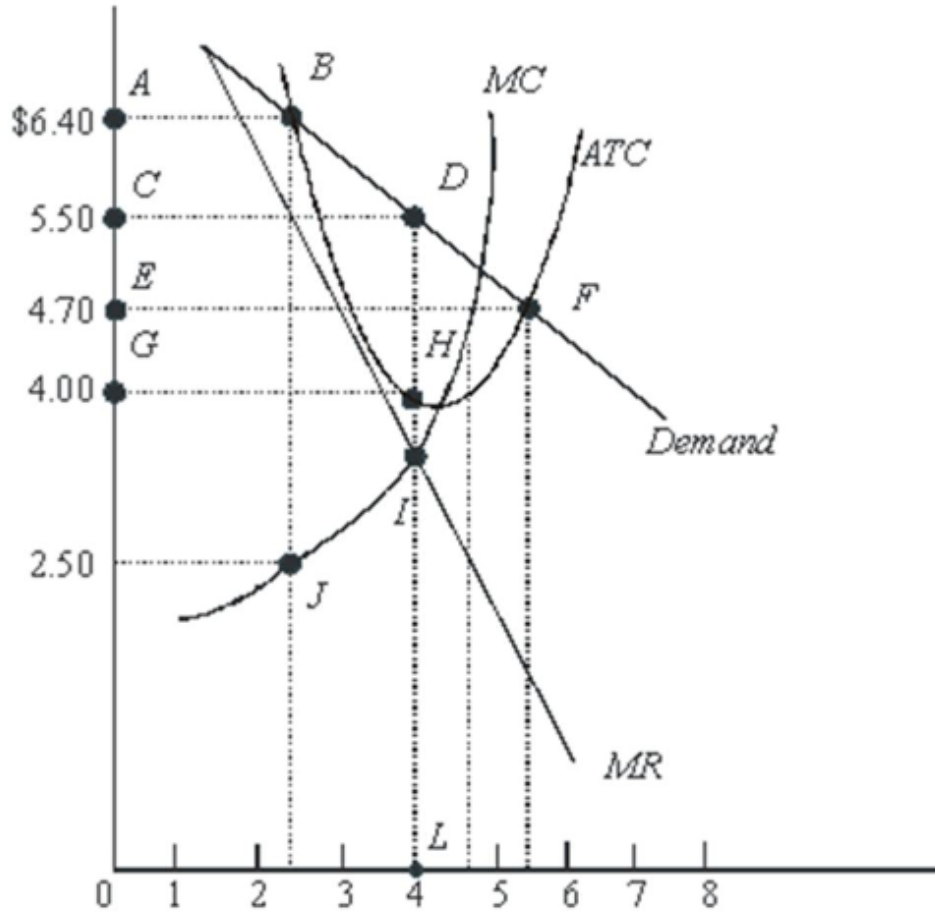
**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-02 How monopoly and competitive outcomes differ.

---

87. award: 10.00 points



**Figure 24.2**

In Figure 24.2, total revenue at the profit-maximizing rate of output is

- \$22.00.
- \$6.40.
- \$4.00.
- \$16.00.

Total revenue is equal to price times quantity, which will be \$22.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-01 How a monopolist sets price and output.

88. award:  
10.00  
points

<u>Quantity</u>	<u>Price</u>	<u>Total cost</u>
1	\$500	\$400
2	450	650
3	400	950
4	350	1,300
5	300	1,700

**Table 24.1**  
**Hypothetical Monopoly Costs and Revenue**

In Table 24.1, according to the profit maximization rule, at the profit-maximizing level of output, total revenue is

- \$900.  
 \$1,200.  
 \$650.  
 \$950.

Profit is maximized at the output level where the difference between revenue and cost is greatest (where MR is equal to MC). This occurs at three units of output, and total revenue is equal to \$1,200 ( $3 \times \$400$ ).

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-01 How a monopolist sets price and output.

89. award:  
10.00  
points

Reductions in minimum average costs that come about through increases in the size of plants and equipment are called

- Barriers to entry.  
 Economies to monopoly power.  
 Economies of scale.  
 Diseconomies of entry.

Economies of scale occur when a firm increases efficiency by investing in a larger plant or more equipment.

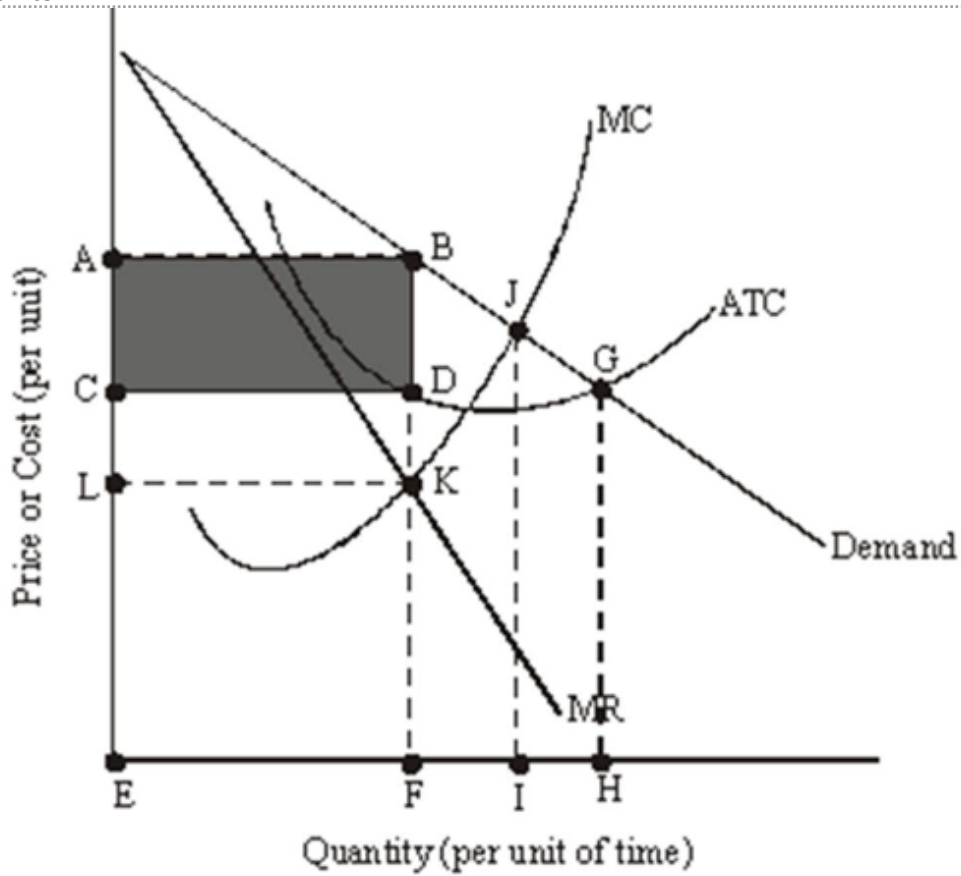
**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-02 How monopoly and competitive outcomes differ.

90.

award:  
10.00  
points



**Figure 24.1**

In Figure 24.1 total cost is represented by the area

- ABFE.
- CDFE.
- ABGHE.
- ABDC.

Total cost will be the ATC times quantity, which is area CDFE.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-01 How a monopolist sets price and output.

91. award:  
10.00  
points

A monopoly

- Maximizes profits at the output level where  $MR > MC$ .
- Produces less output than a competitive industry, *ceteris paribus*.
- Charges the same price as a competitive industry, *ceteris paribus*.
- Maximizes profits at the output where  $P = MR$ .

When compared to a competitive market, monopolists tend to charge a higher price and produce a lower level of output.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 10-02 How monopoly and competitive outcomes differ.

92. award:  
10.00  
points

The potential for maximizing total industry profits is greater in oligopolies than in perfect competition because

- There are fewer firms and each is dependent on the actions of rivals.
- Firms in an oligopoly are more profitable.
- There are independent firms in an oligopoly.
- Perfectly competitive firms can easily cooperate to restrict supply.

Oligopoly firms strive to behave like a monopoly to maximize industry profits. They can do this more easily than can firms in perfect competition because there are only a few large firms in the industry and they are interdependent.

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-02 How oligopolies maximize profits.

93. award:  
10.00  
points

Which of the following is the critical determinant of market power?

- The number of producers.
- The size of each firm.
- The extent of barriers to entry.
- The availability of substitute goods.

The determinants of market power include number of producers, size of each firm, barriers to entry, and availability of substitute goods. However, the extent of barriers to entry is the most critical factor in maintaining control over price.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-01 The unique characteristics of oligopoly.

---

94. award:  
10.00  
points

A cartel is

- A type of market structure.
- Not illegal in the United States.
- An organization intended to increase competition in an industry.
- A public agreement between firms or countries to restrict production and raise prices.

An oligopoly strives to behave like a monopoly to maximize industry profits. A monopoly and an oligopoly produce at an elastic point on the demand curve because on the inelastic portion of the demand curve, higher prices will bring higher revenues and therefore will continue to increase prices and decrease output until the point where demand is elastic.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-03 How interdependence affects oligopolists' pricing decisions.

---

95. award:  
10.00  
points

Oligopolists have a mutual interest in coordinating production decisions in order to maximize joint

- Costs.
- Profits.
- Revenues.
- Market share.

An oligopoly strives to behave like a monopoly to maximize industry profits.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-02 How oligopolies maximize profits.

---

96. award:  
10.00  
points

Which of the following does *not* function as a barrier to entry into an oligopoly market?

- Patents.
- The expense involved in nonprice competition.
- Control of distribution outlets.
- Predatory pricing.

Predatory price cuts are temporary price reductions intended to drive out new competition or reestablish market shares, but are not a sustainable barrier to entry. Barriers to entry include patents, nonprice competition, control of distribution outlets, and government regulation.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-01 The unique characteristics of oligopoly.

---

97. award:  
10.00  
points

The only market structure in which there is significant interdependence among firms with regard to their pricing and output decisions is

- Monopolistic competition.
- Monopoly.
- Oligopoly.
- Perfect competition.

Because an oligopoly is a market that includes only a few firms, strategy is very important.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-01 The unique characteristics of oligopoly.

---

98. award:  
10.00  
points

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The demand curve facing an oligopoly firm is kinked because

- Its competitors will match only price hikes.
- It is most likely that rivals will match price cuts but not price increases.
- The demand curve that is most inelastic is the most probable situation facing the company.
- It is most likely that competitors will match price hikes as they practice price leadership.

If an oligopoly firm raises price, it is not likely that rivals will match, so it will lose market share. This result is on the more elastic portion of the demand curve. If an oligopoly company lowers price, rivals will tend to match. This result is on the more inelastic portion of the demand curve. Hence the shape of the demand curve is kinked.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-02 How oligopolies maximize profits.

---

99. award:  
10.00  
points

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Market power is the ability of a firm to

- Advertise.
- Act as a price taker.
- Control the price and quantity supplied.
- Increase the number of substitute goods.

Firms in an oligopoly have market power because they can influence the price of their products; in perfectly competitive markets sellers have no control over price.

---

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-01 The unique characteristics of oligopoly.

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award:  
**100.10.00**  
**points**

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Price leadership

- Typically results in greater instability in oligopolistic markets.
- Is illegal under the Federal Trade Commission Act.
- Is common in perfectly competitive markets.
- Permits oligopolistic firms in a given market to coordinate marketwide price changes.

Price leadership is a subtle (not explicit) pricing pattern that allows one firm to establish the (market) price for all firms in the industry.

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**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 11-03 How interdependence affects oligopolists' pricing decisions.

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