



# SUPPLY

- *Quantity supplied* is the amount of a good that sellers are willing and able to sell.
- Law of Supply
  - The *law of supply* states that, other things equal, the quantity supplied of a good rises when the price of the good rises.

# The Supply Curve: The Relationship between Price and Quantity Supplied

- Supply Schedule
  - The *supply schedule* is a table that shows the relationship between the price of the good and the quantity supplied.

# Ben's Supply Schedule

Price of Ice-Cream Cone	Quantity of Cones Supplied
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\$0.00

0 cones

0.50

0

1.00

1

1.50

2

2.00

3

2.50

4

3.00

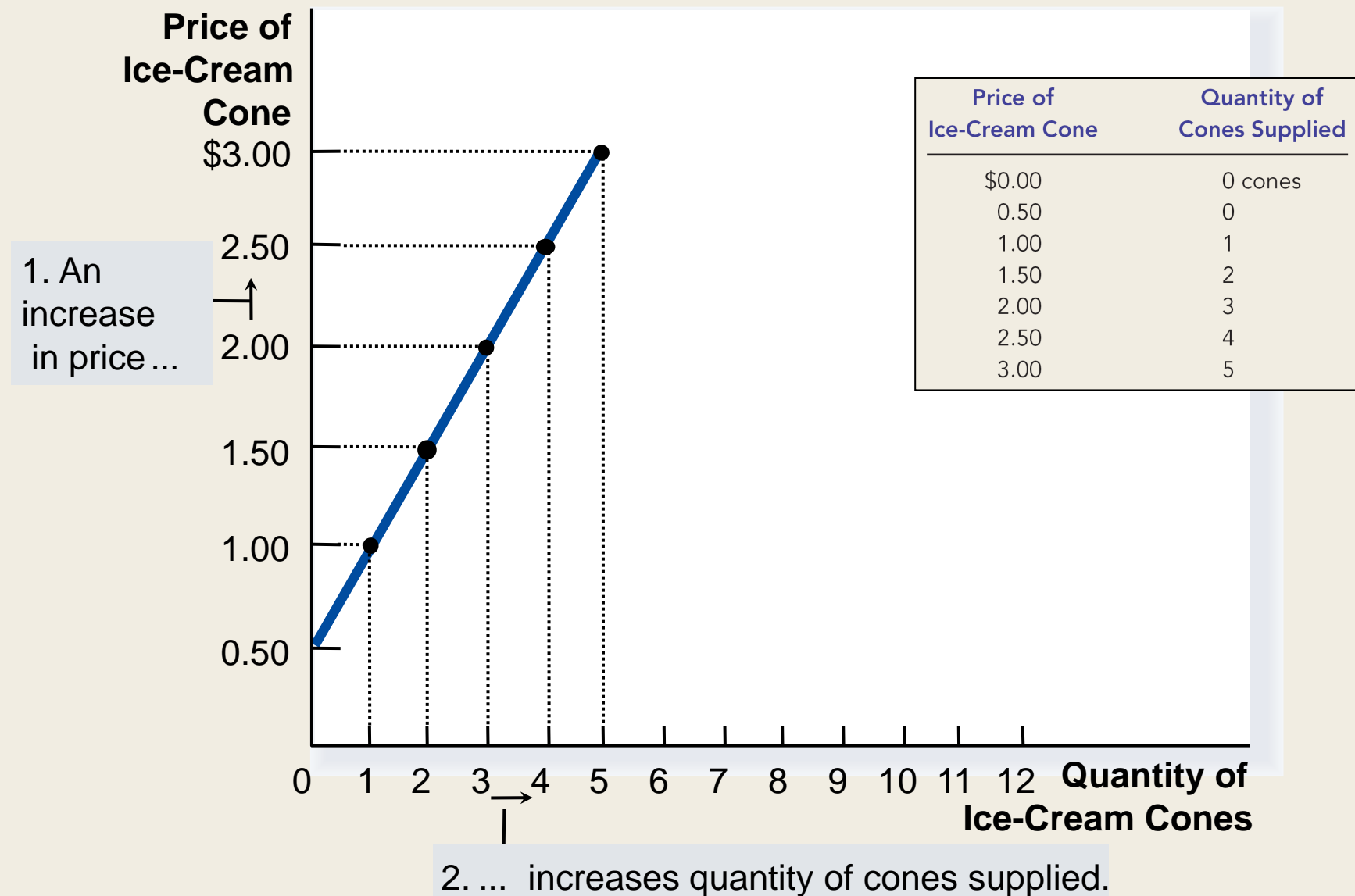
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# The Supply Curve: The Relationship between Price and Quantity Supplied

- Supply Curve
  - The *supply curve* is the graph of the relationship between the price of a good and the quantity supplied.

## Figure 5 Ben's Supply Schedule and Supply Curve



# Market Supply versus Individual Supply

- Market supply refers to the sum of all individual supplies for all sellers of a particular good or service.
- Graphically, individual supply curves are summed horizontally to obtain the market supply curve.

# Shifts in the Supply Curve

- Input prices
- Technology
- Expectations
- Number of sellers

# Shifts in the Supply Curve

- Change in Quantity Supplied
  - Movement along the supply curve.
  - Caused by a change in anything that alters the quantity supplied at each price.



# Change in Quantity Supplied

Price of Ice-Cream Cone

\$3.00

1.00

0

1

5

Quantity of Ice-Cream Cones

S

C

A

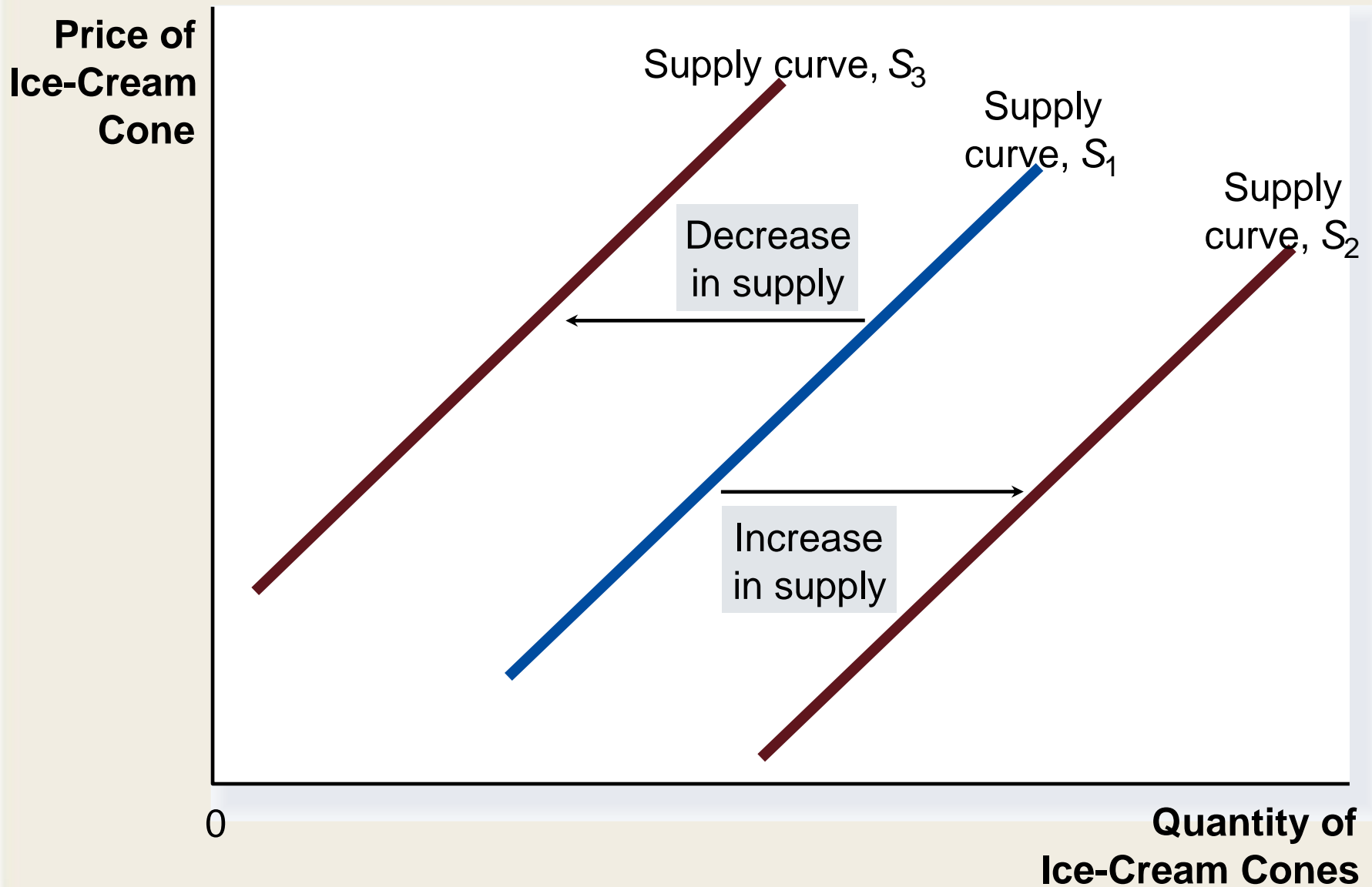
A rise in the price of ice cream cones results in a movement along the supply curve.



# Shifts in the Supply Curve

- Change in Supply
  - A shift in the supply curve, either to the left or right.
  - Caused by a change in a determinant other than price.

## Figure 7 Shifts in the Supply Curve



## Table 2: Variables That Influence Sellers

Variable	A Change in This Variable. . .
Price	Represents a movement along the supply curve
Input prices	Shifts the supply curve
Technology	Shifts the supply curve
Expectations	Shifts the supply curve
Number of sellers	Shifts the supply curve



# SUPPLY AND DEMAND TOGETHER

- *Equilibrium* refers to a situation in which the price has reached the level where quantity supplied equals quantity demanded.



# SUPPLY AND DEMAND TOGETHER

- *Equilibrium Price*

- The price that balances quantity supplied and quantity demanded.
- On a graph, it is the price at which the supply and demand curves intersect.

- *Equilibrium Quantity*

- The quantity supplied and the quantity demanded at the equilibrium price.
- On a graph it is the quantity at which the supply and demand curves intersect.



# SUPPLY AND DEMAND TOGETHER

## Demand Schedule

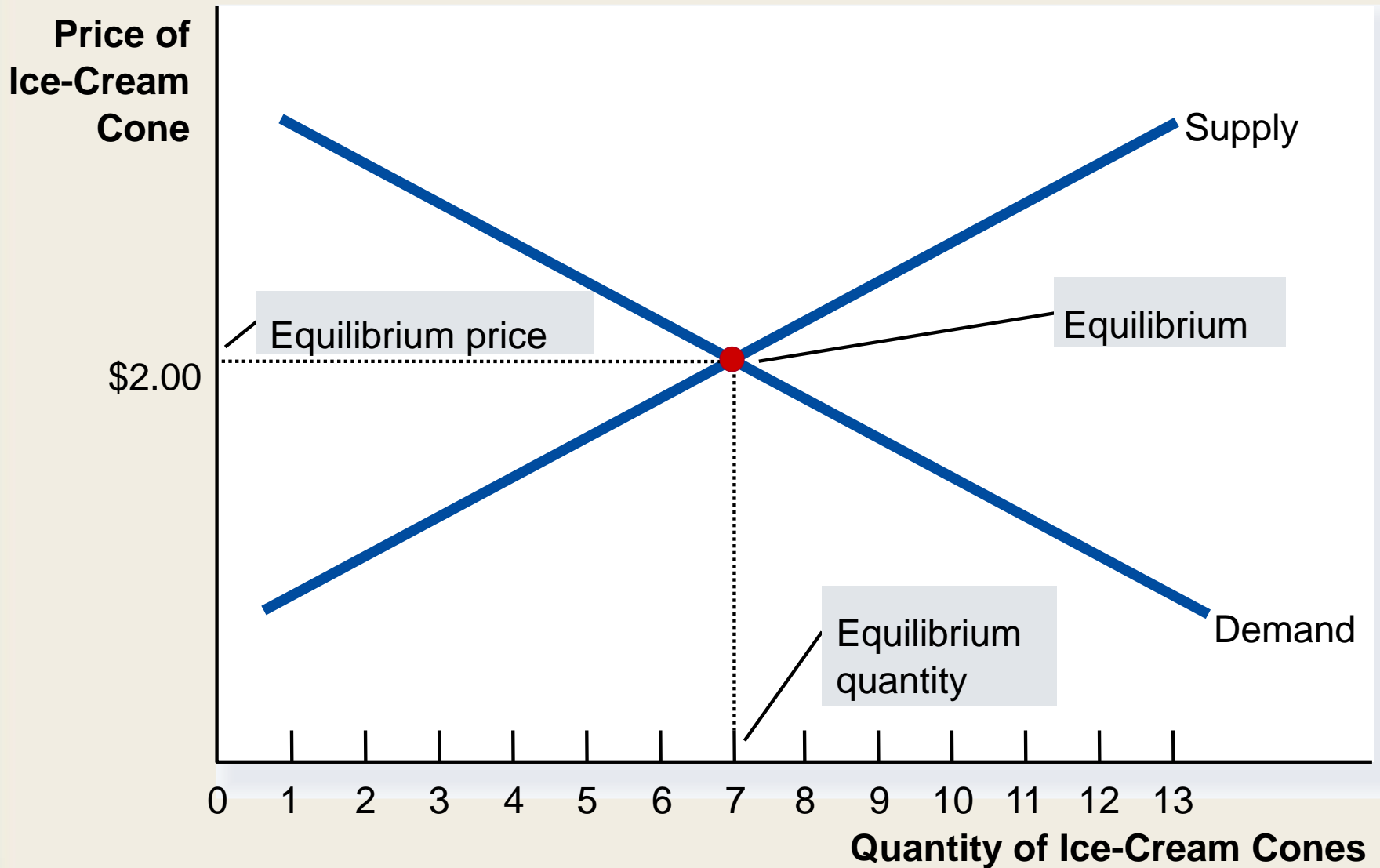
Price of Ice-Cream Cone	Market
\$0.00	19
0.50	16
1.00	13
1.50	10
2.00	7
2.50	4
3.00	1

## Supply Schedule

Price of Ice-Cream Cone	Market
\$0.00	0
0.50	0
1.00	1
1.50	4
2.00	7
2.50	10
3.00	13

At \$2.00, the quantity demanded is equal to the quantity supplied!

## Figure 8 The Equilibrium of Supply and Demand



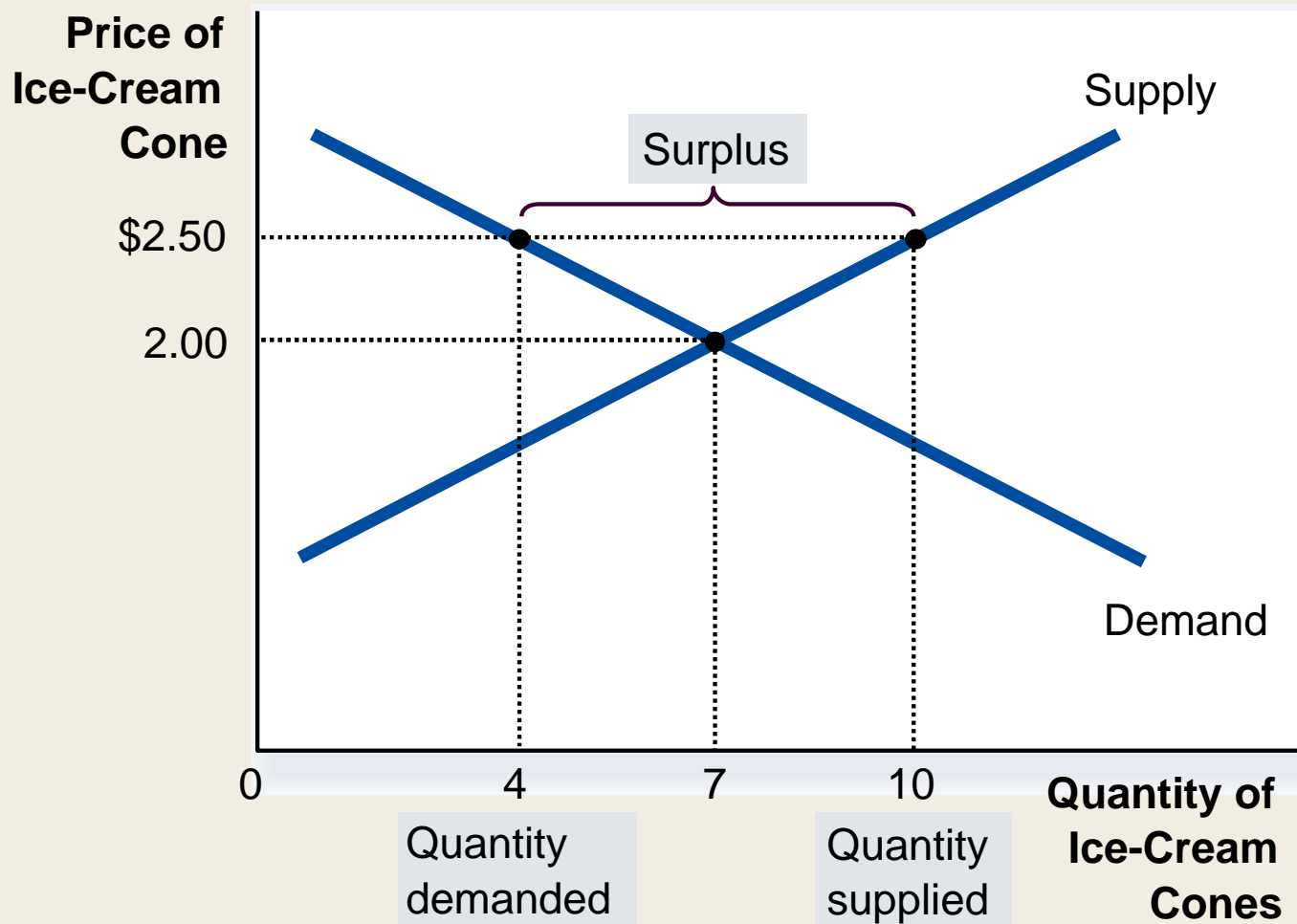


# Equilibrium

- *Surplus*
  - When price  $>$  equilibrium price, then quantity supplied  $>$  quantity demanded.
    - There is excess supply or a surplus.
    - Suppliers will lower the price to increase sales, thereby moving toward equilibrium.

## Figure 9 Markets Not in Equilibrium

(a) Excess Supply

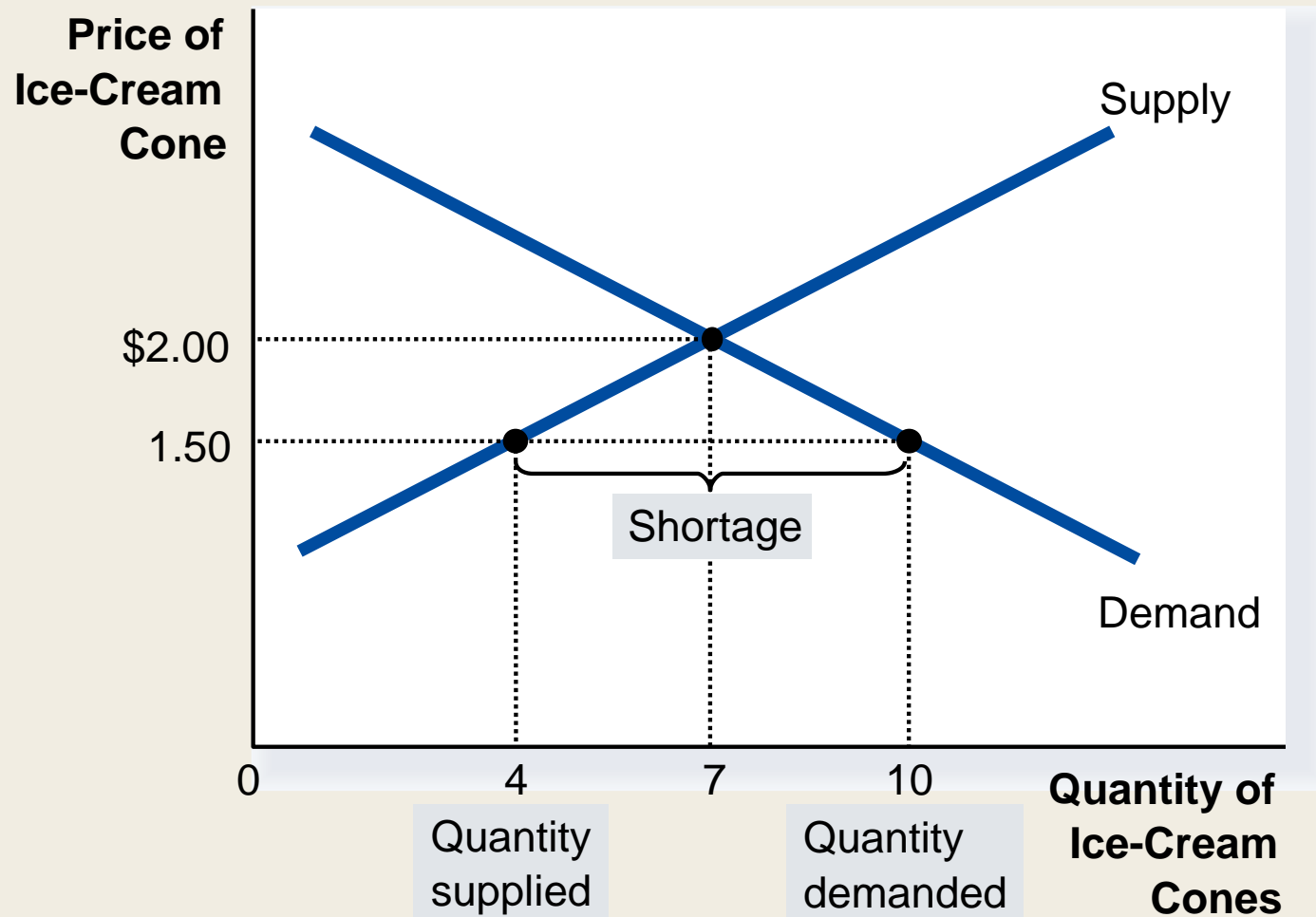


# Equilibrium

- *Shortage*
  - When  $\text{price} < \text{equilibrium price}$ , then  $\text{quantity demanded} > \text{the quantity supplied}$ .
    - There is excess demand or a shortage.
    - Suppliers will raise the price due to too many buyers chasing too few goods, thereby moving toward equilibrium.

## Figure 9 Markets Not in Equilibrium

(b) Excess Demand



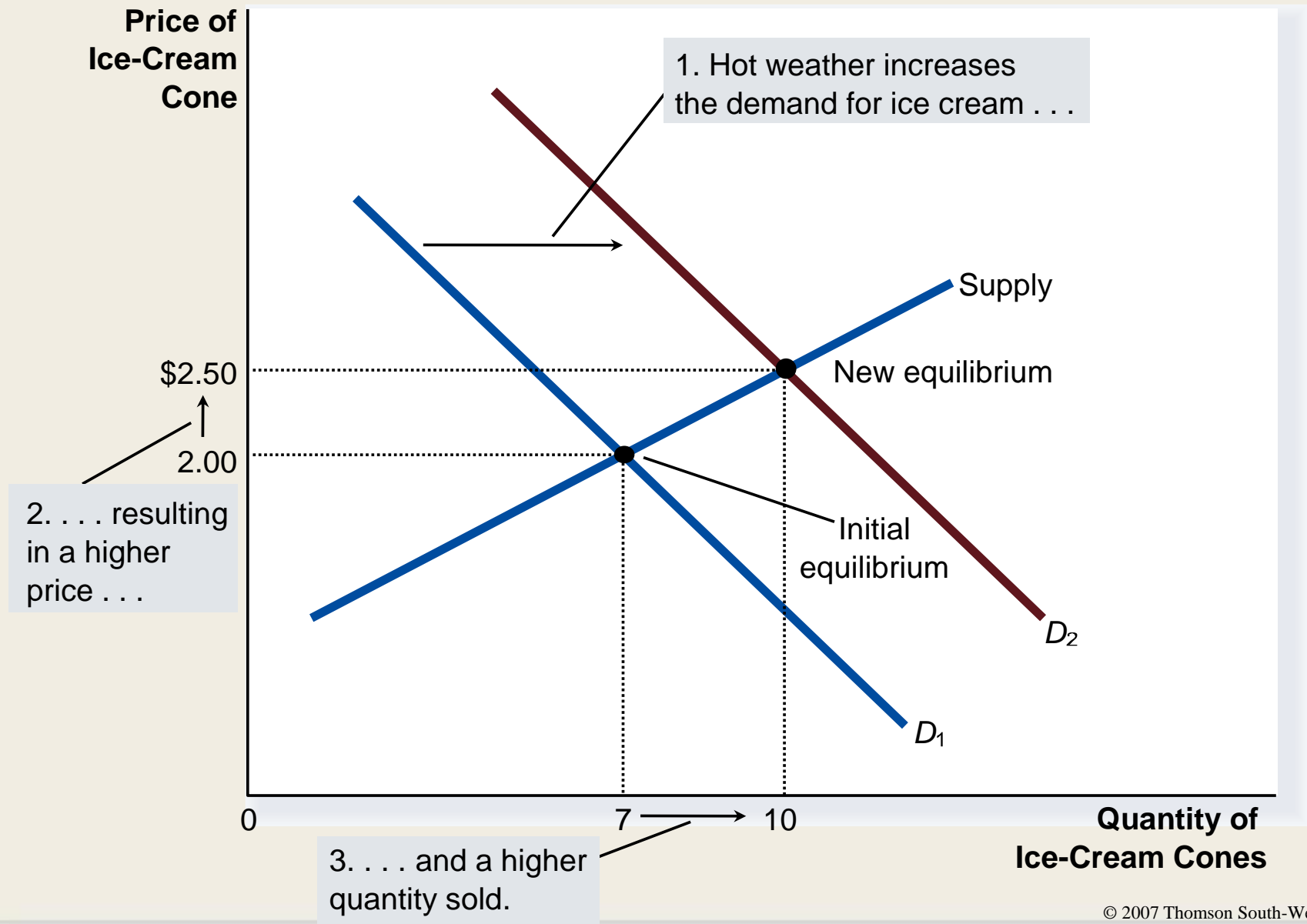
# Equilibrium

- *Law of supply and demand*
  - The claim that the price of any good adjusts to bring the quantity supplied and the quantity demanded for that good into balance.

## **Table 3: Three Steps for Analyzing Changes in Equilibrium**

1. Decide whether the event shifts the supply or demand curve (or perhaps both).
2. Decide in which direction the curve shifts.
3. Use the supply-and-demand diagram to see how the shift changes the equilibrium price and quantity.

# Figure 10 How an Increase in Demand Affects the Equilibrium

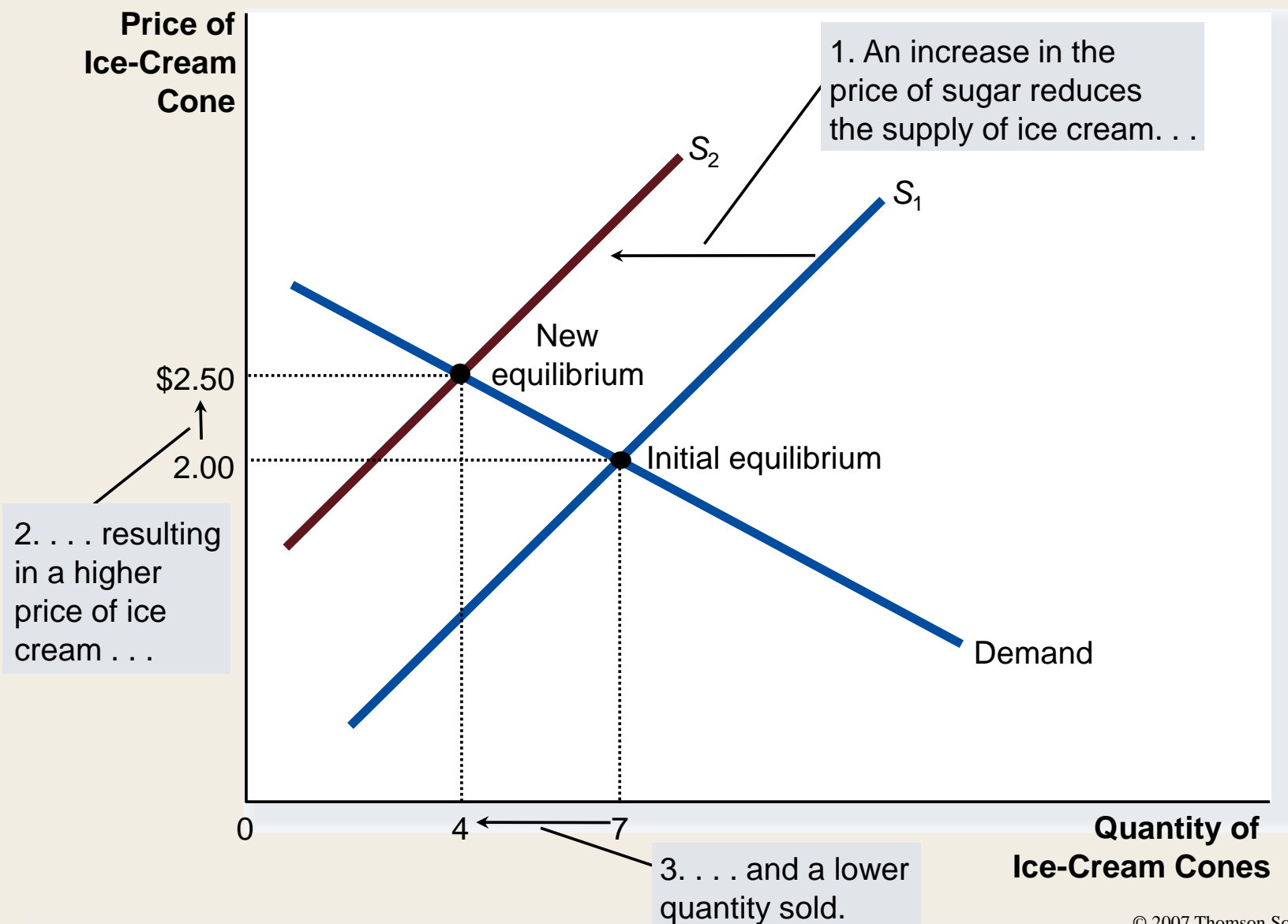


# Three Steps to Analyzing Changes in Equilibrium

- Shifts in Curves versus Movements along Curves
  - A shift in the supply curve is called a change in supply.
  - A movement along a fixed supply curve is called a change in quantity supplied.
  - A shift in the demand curve is called a change in demand.
  - A movement along a fixed demand curve is called a change in quantity demanded.



## Figure 11 How a Decrease in Supply Affects the Equilibrium



**Table 4: What Happens to Price and Quantity When Supply or Demand Shifts?**

	No Change in Supply	An Increase in Supply	A Decrease in Supply
No Change in Demand	$P$ same $Q$ same	$P$ down $Q$ up	$P$ up $Q$ down
An Increase in Demand	$P$ up $Q$ up	$P$ ambiguous $Q$ up	$P$ up $Q$ ambiguous
A Decrease in Demand	$P$ down $Q$ down	$P$ down $Q$ ambiguous	$P$ ambiguous $Q$ down

# Summary

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- Economists use the model of supply and demand to analyze competitive markets.
- In a competitive market, there are many buyers and sellers, each of whom has little or no influence on the market price.

# Summary

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- The demand curve shows how the quantity of a good depends upon the price.
  - According to the law of demand, as the price of a good falls, the quantity demanded rises. Therefore, the demand curve slopes downward.
  - In addition to price, other determinants of how much consumers want to buy include income, the prices of complements and substitutes, tastes, expectations, and the number of buyers.
  - If one of these factors changes, the demand curve shifts.

# Summary

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- The supply curve shows how the quantity of a good supplied depends upon the price.
  - According to the law of supply, as the price of a good rises, the quantity supplied rises. Therefore, the supply curve slopes upward.
  - In addition to price, other determinants of how much producers want to sell include input prices, technology, expectations, and the number of sellers.
  - If one of these factors changes, the supply curve shifts.

# Summary

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- Market equilibrium is determined by the intersection of the supply and demand curves.
- At the equilibrium price, the quantity demanded equals the quantity supplied.
- The behavior of buyers and sellers naturally drives markets toward their equilibrium.

# Summary

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- To analyze how any event influences a market, we use the supply-and-demand diagram to examine how the event affects the equilibrium price and quantity.
- In market economics, prices are the signals that guide economic decisions and thereby allocate resources.