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## The Market Forces of Supply and Demand



# MARKETS AND COMPETITION

- Supply and demand are the two words that economists use most often.
- Supply and demand are the forces that make market economies work.
- Modern microeconomics is about supply, demand, and market equilibrium.

# What Is a Market?

- A *market* is a group of buyers and sellers of a particular good or service.



- The terms supply and demand refer to the behavior of people . . . as they interact with one another in markets.

# What Is a Market?

- Buyers determine *demand*.
- Sellers determine *supply*.

# What Is Competition?

- A *competitive market* is a market in which there are many buyers and sellers so that each has a negligible impact on the market price.

# What Is Competition?

- Competition: Perfect and Otherwise
  - Perfect Competition
    - Products are the same
    - Numerous buyers and sellers so that each has no influence over price
    - Buyers and Sellers are price takers
  - Monopoly
    - One seller, and seller controls price

# What Is Competition?

- Competition: Perfect and Otherwise
  - Oligopoly
    - Few sellers
    - Not always aggressive competition
  - Monopolistic Competition
    - Many sellers
    - Slightly differentiated products
    - Each seller may set price for its own product



# DEMAND

- *Quantity demanded* is the amount of a good that buyers are willing and able to purchase.
- Law of Demand
  - The *law of demand* states that, other things equal, the quantity demanded of a good falls when the price of the good rises.



# The Demand Curve: The Relationship between Price and Quantity Demanded

- Demand Schedule
  - The *demand schedule* is a table that shows the relationship between the price of the good and the quantity demanded.

# Catherine's Demand Schedule

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

12

0.50

10

1.00

8

1.50

6

2.00

4

2.50

2

3.00

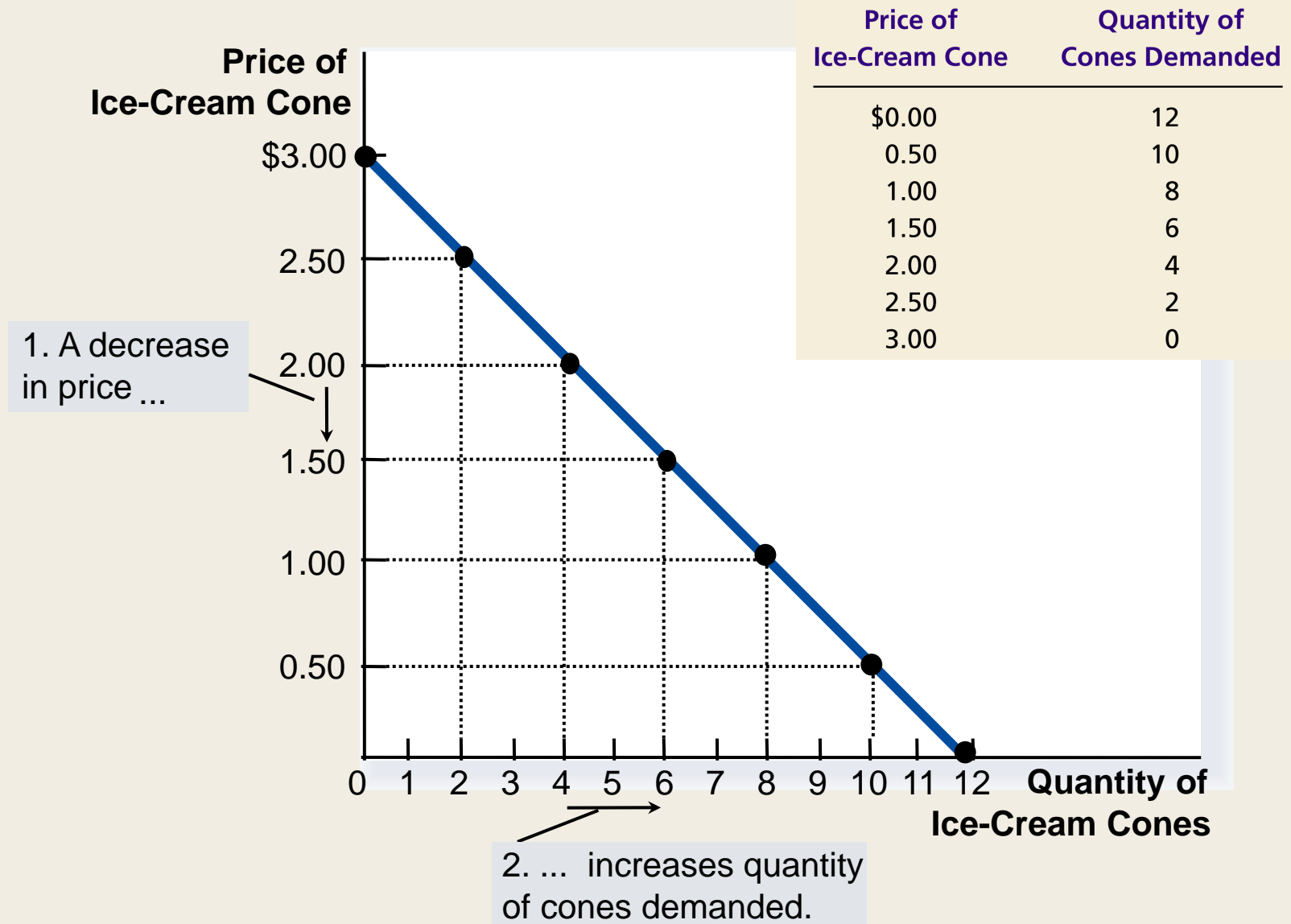
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# The Demand Curve: The Relationship between Price and Quantity Demanded

- Demand Curve
  - The *demand curve* is a graph of the relationship between the price of a good and the quantity demanded.

# Figure 1 Catherine's Demand Schedule and Demand Curve



# Market Demand versus Individual Demand

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

# The Market Demand Curve

When the price is \$2.00, Catherine will demand 4 ice-cream cones.

When the price is \$2.00, Nicholas will demand 3 ice-cream cones.

The market demand at \$2.00 will be 7 ice-cream cones.

Catherine's Demand

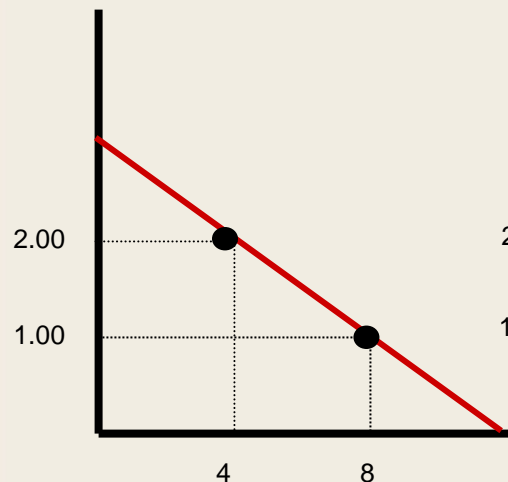
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Nicholas's Demand

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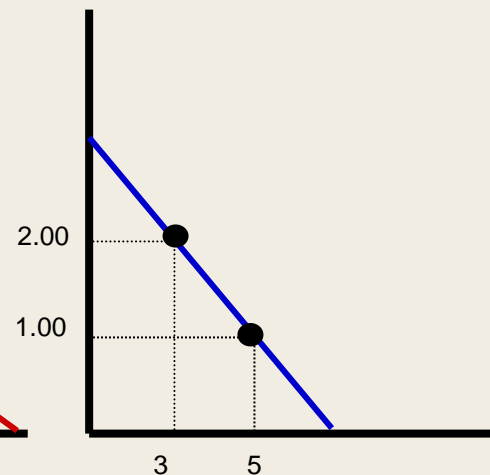
Market Demand

Price of Ice-Cream Cone



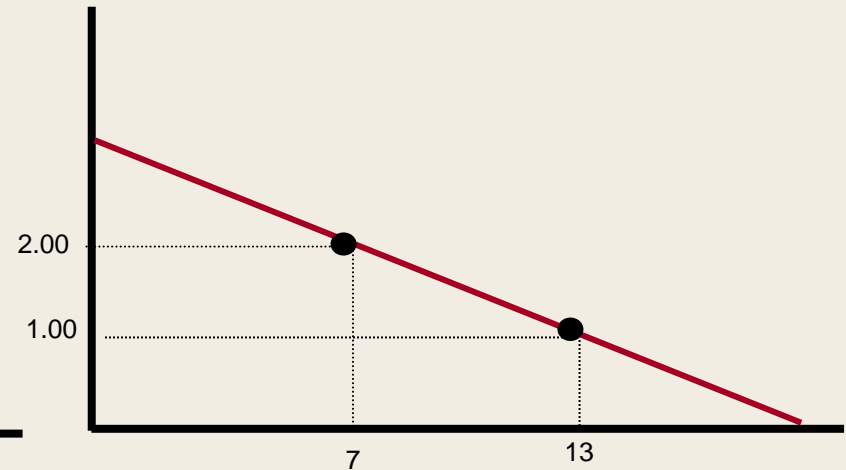
Quantity of Ice-Cream Cones

Price of Ice-Cream Cone



Quantity of Ice-Cream Cones

Price of Ice-Cream Cone



Quantity of Ice-Cream Cones

When the price is \$1.00, Catherine will demand 8 ice-cream cones.

When the price is \$1.00, Nicholas will demand 5 ice-cream cones.

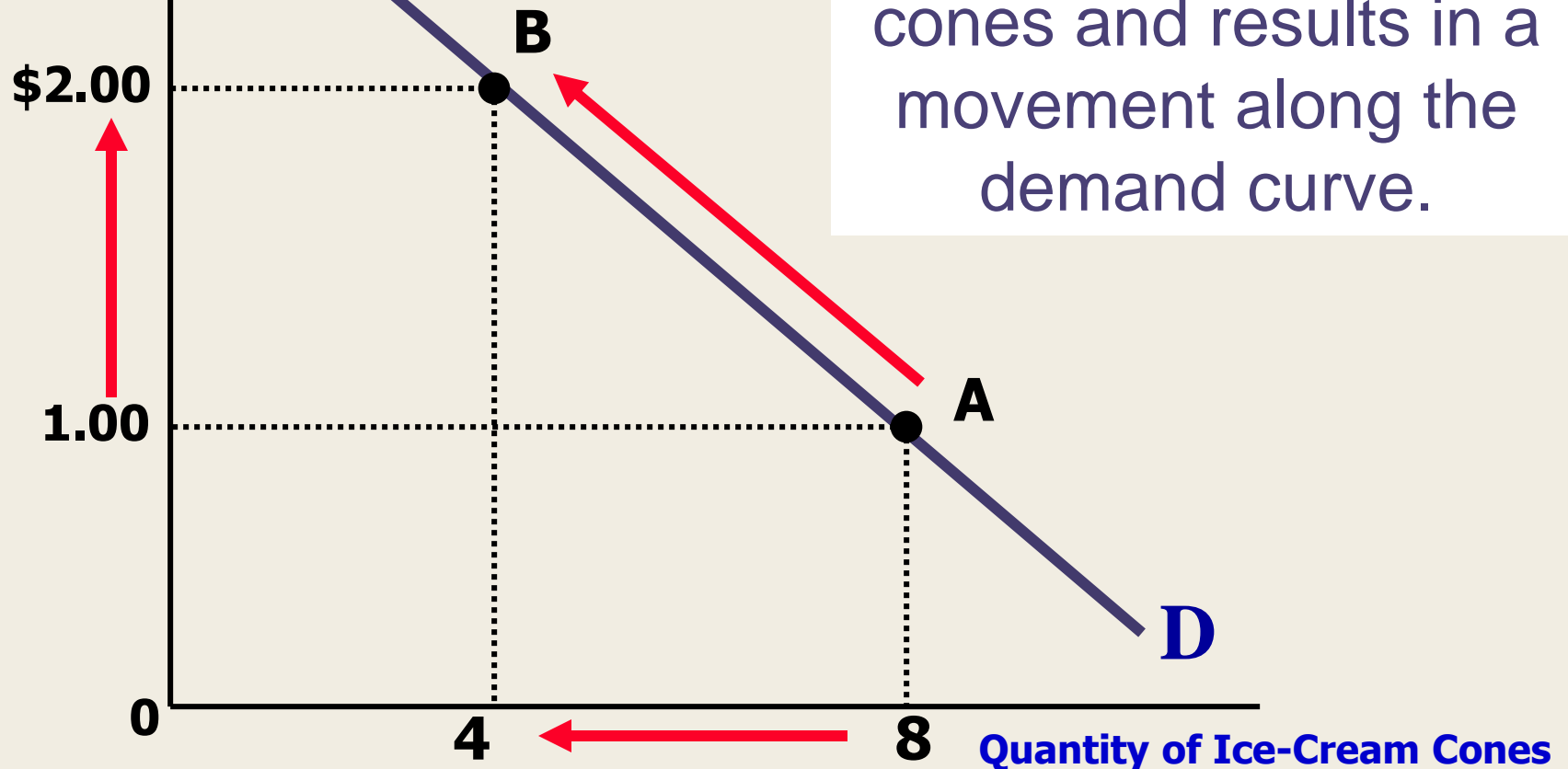
The market demand at \$1.00, will be 13 ice-cream cones.

# Shifts in the Demand Curve

- Change in Quantity Demanded
  - Movement along the demand curve.
  - Caused by a change in the price of the product.

## Changes in Quantity Demanded

Price of Ice-Cream Cones



A tax on sellers of ice-cream cones raises the price of ice-cream cones and results in a movement along the demand curve.



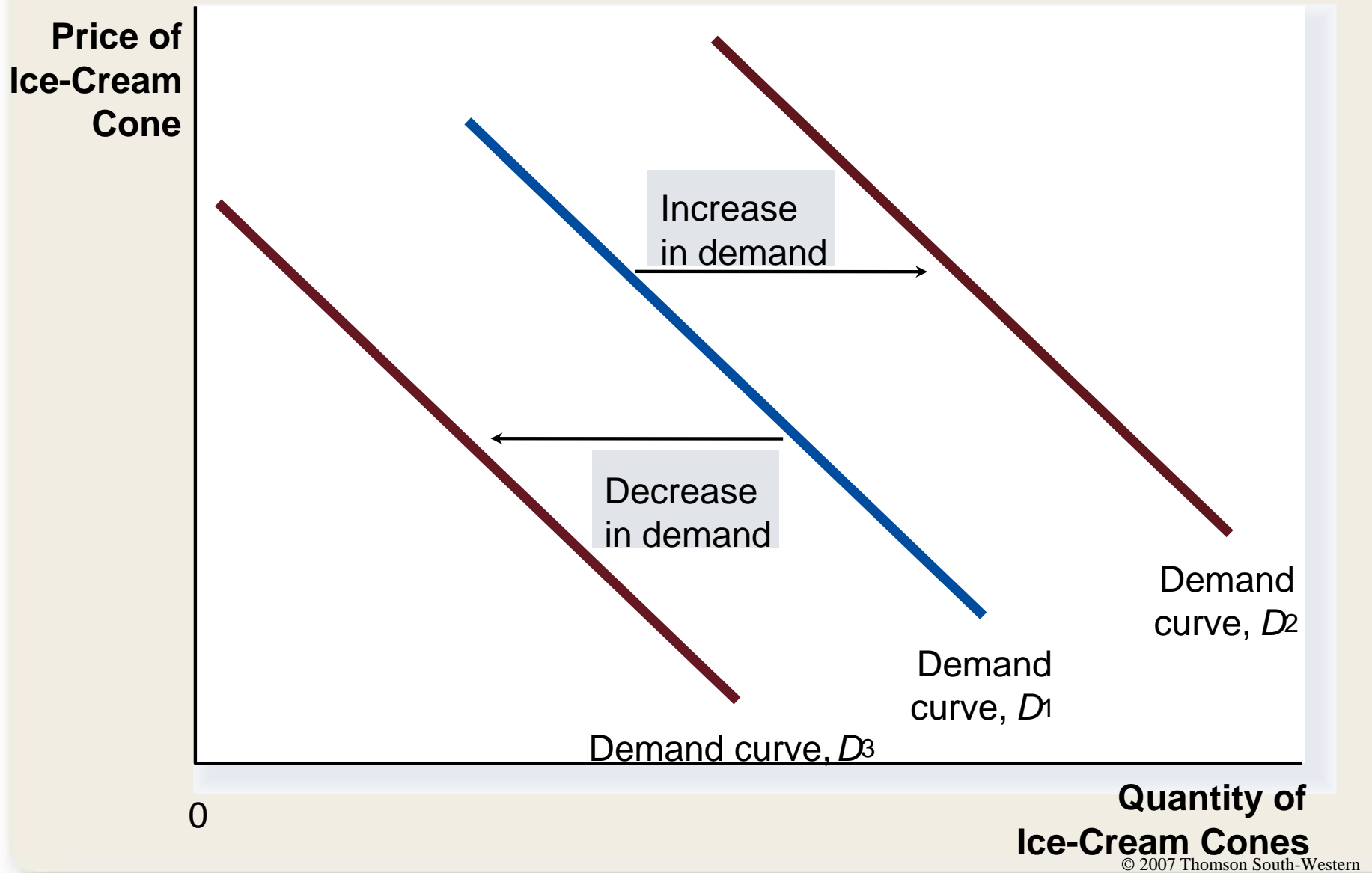
# Shifts in the Demand Curve

- Consumer income
- Prices of related goods
- Tastes
- Expectations
- Number of buyers

# Shifts in the Demand Curve

- Change in Demand
  - A shift in the demand curve, either to the left or right.
  - Caused by any change that alters the quantity demanded at every price.

## Figure 3 Shifts in the Demand Curve



## Shifts in the Demand Curve

- Consumer Income
  - As income increases the demand for a *normal good* will increase.
  - As income increases the demand for an *inferior good* will decrease.

# Consumer Income Normal Good

Price of Ice-Cream Cone

\$3.00

2.50

2.00

1.50

1.00

0.50

0

1

2

3

4

5

6

7

8

9

10

11

12

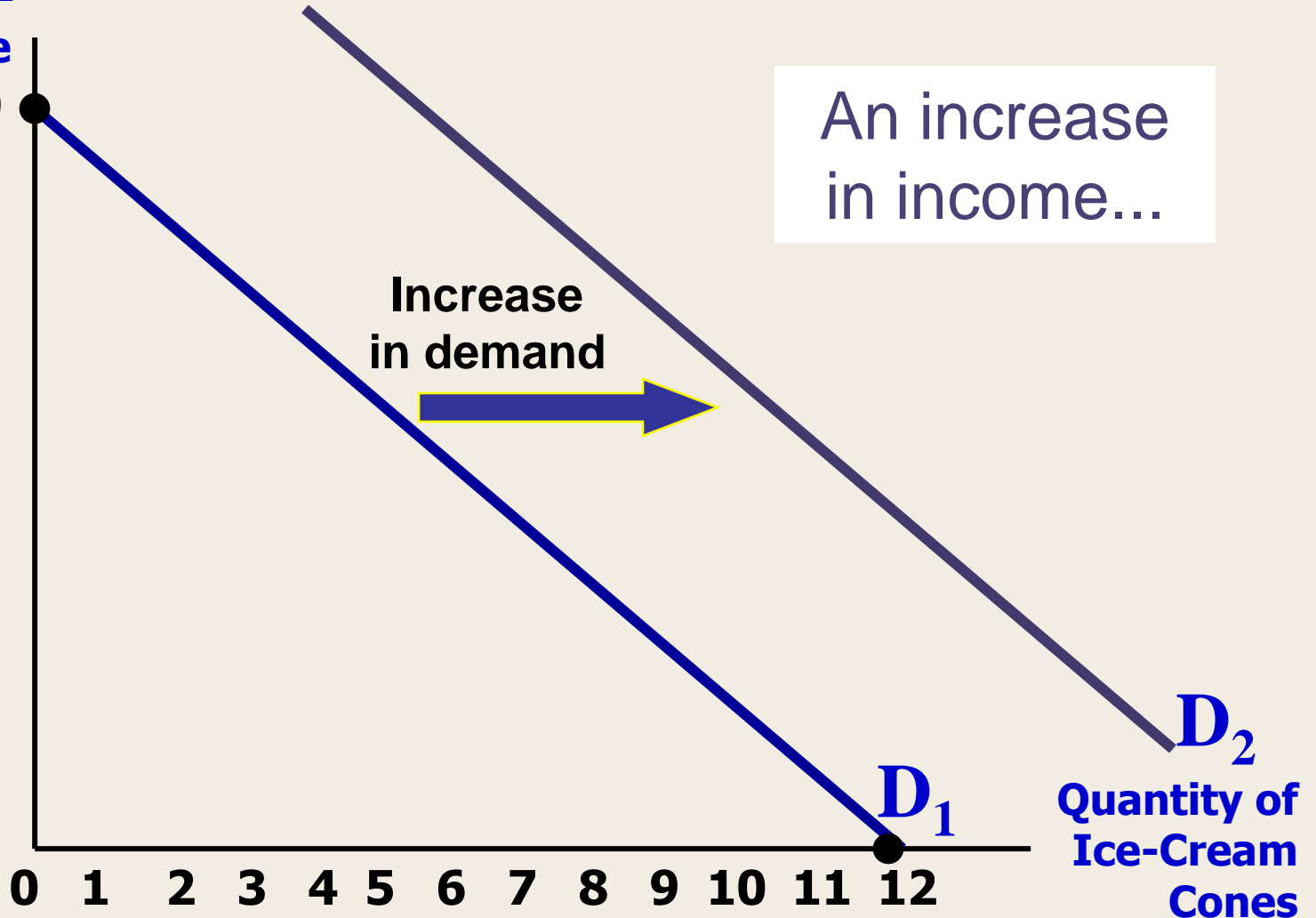
Increase  
in demand

An increase  
in income...

$D_2$

$D_1$

Quantity of  
Ice-Cream  
Cones



## Consumer Income Inferior Good

Price of Ice-Cream Cone

\$3.00

2.50

2.00

1.50

1.00

0.50

0

1

2

3

4

5

6

7

8

9

10

11

12

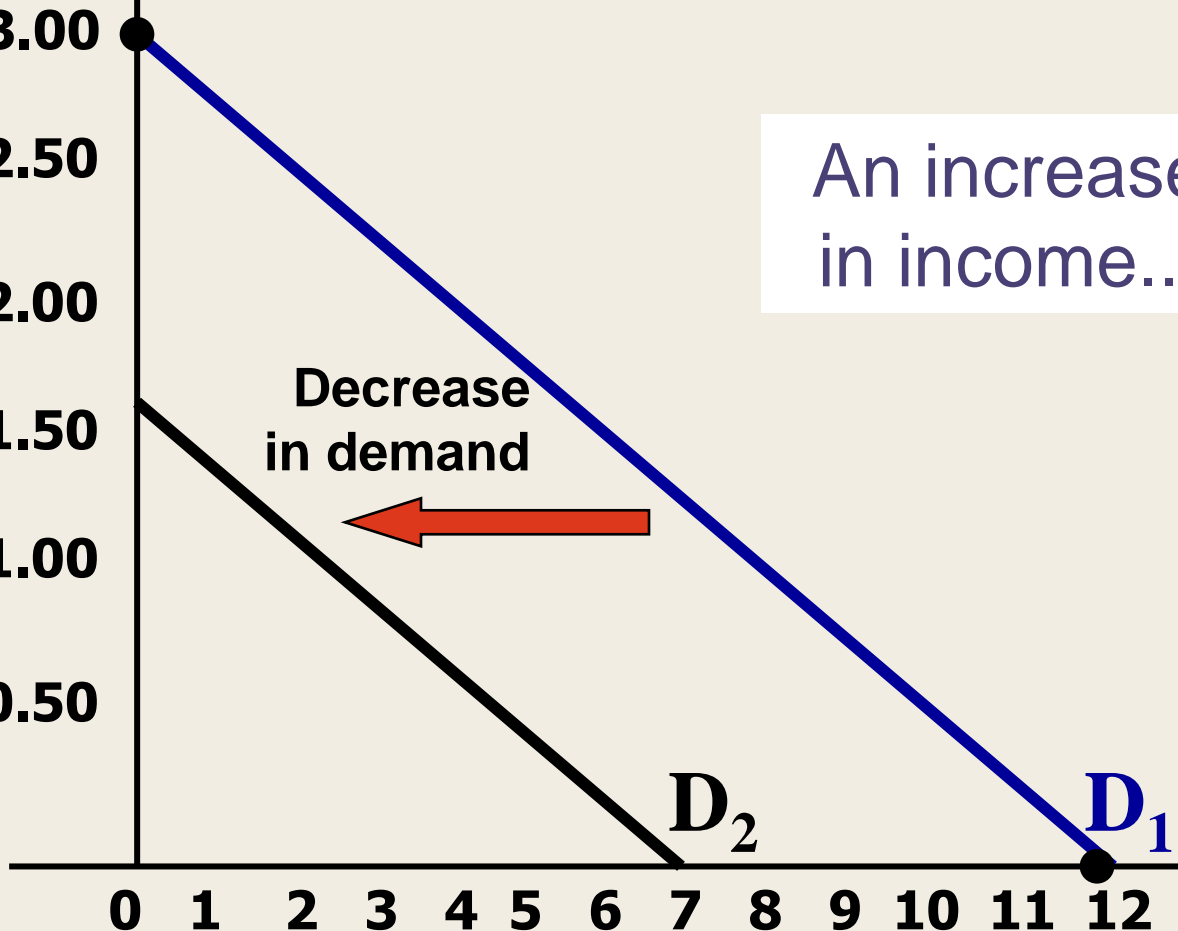
Decrease  
in demand

An increase  
in income...

$D_2$

$D_1$

Quantity of  
Ice-Cream  
Cones



## Shifts in the Demand Curve

- Prices of Related Goods
  - When a fall in the price of one good reduces the demand for another good, the two goods are called *substitutes*.
  - When a fall in the price of one good increases the demand for another good, the two goods are called *complements*.

## Table 1 Variables That Influence Buyers

Variable	A Change in This Variable. . .
Price	Represents a movement along the demand curve
Income	Shifts the demand curve
Prices of related goods	Shifts the demand curve
Tastes	Shifts the demand curve
Expectations	Shifts the demand curve
Number of buyers	Shifts the demand curve