ECONOMICS 201: WEEK 1
SUPPLY AND DEMAND

MICRO VIEW OF THE ECONOMY

Economy is composed of a collection of markets.

Types of Markets

- Product Markets
- Labor Markets
- Capital Markets

COMPETITION IN MARKETS

Perfectly competitive market

- No buyer or seller has the power to influence price.
- Supply and demand model

Imperfectly competitive market

- Buyers or sellers have power to influence price.

COMPETITION IN THE REAL WORLD

Perfect competition

- Rare

Supply and demand model

- Versatile and widely used model
- Most markets have characteristics that prevent markets from behaving exactly as predicted.

DEMAND

Buyers determine demand.

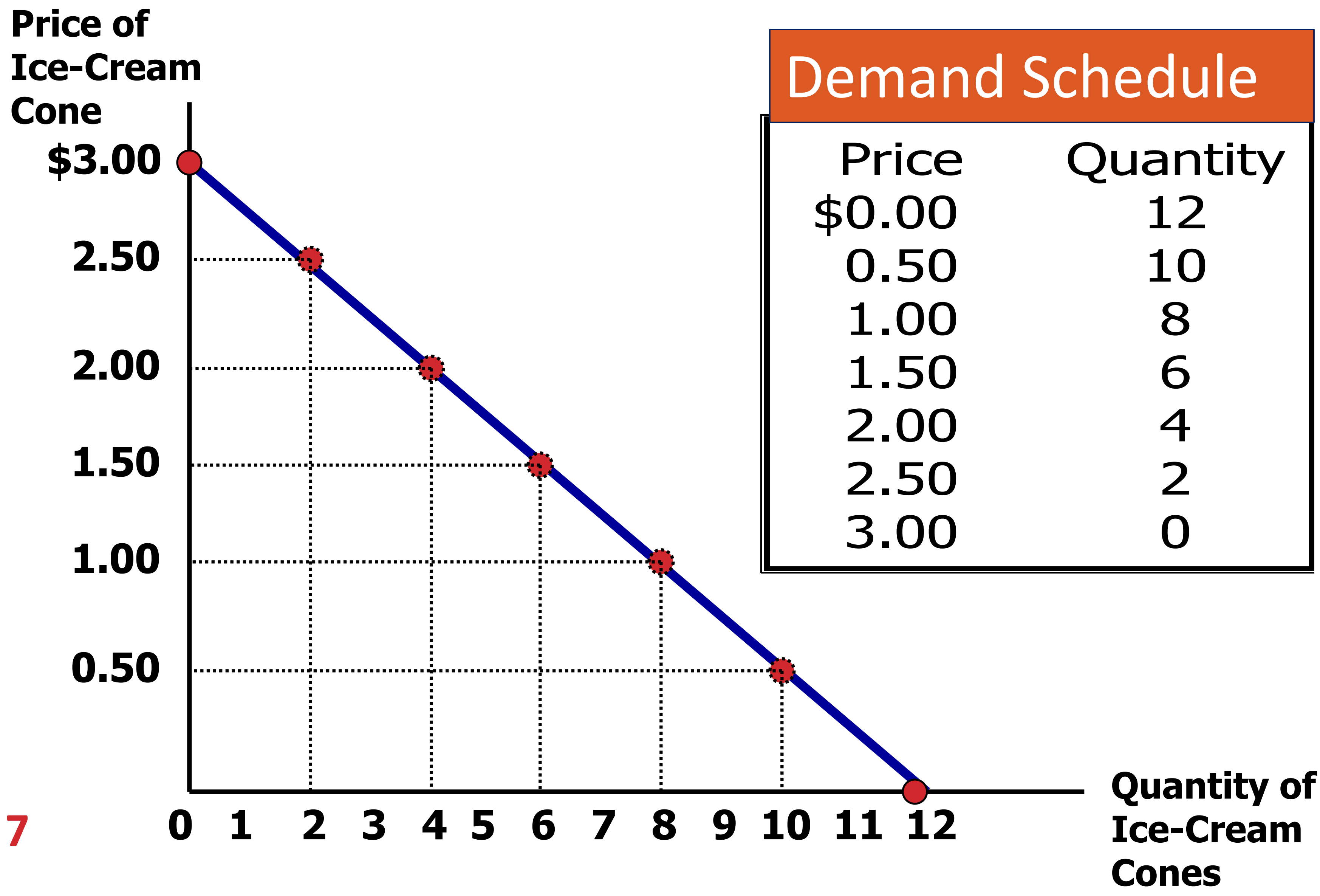
Demand schedule

- Quantities of a good that consumers would choose to purchase at different prices.
- At a certain period of time.
- *ceteris paribus*

DEMAND SCHEDULE

Price	Quantity
$0.00	12
0.50	10
1.00	8
1.50	6
2.00	4
2.50	2
3.00	0

DEMAND CURVE



Demand Schedule

Price	Quantity
$0.00	12
0.50	10
1.00	8
1.50	6
2.00	4
2.50	2
3.00	0

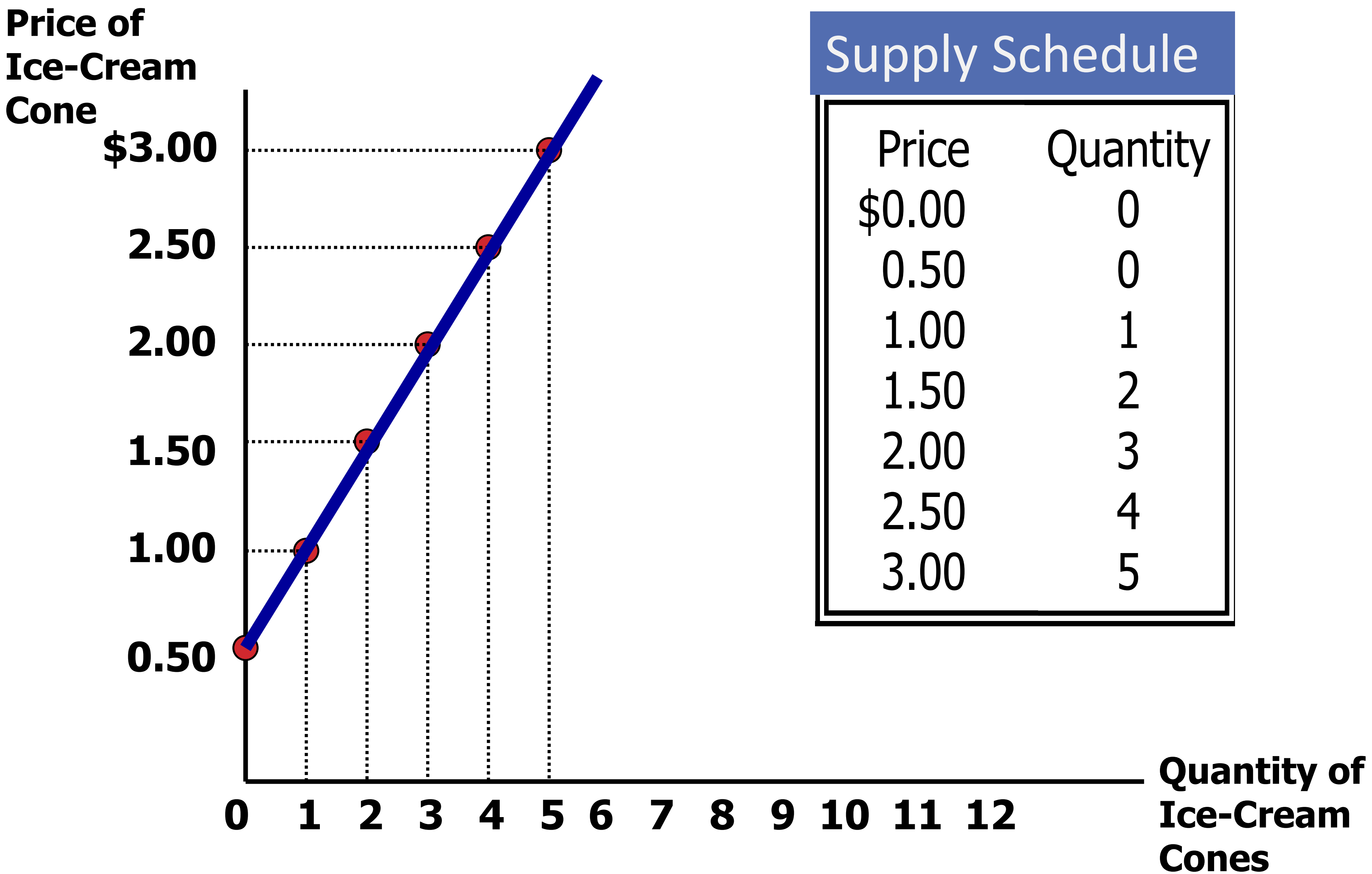
SUPPLY

Sellers determine supply.

Supply schedule

- Quantities of a good that firms would be willing to offer for sale at different prices.
- At a certain period of time.
- *ceteris paribus*

SUPPLY CURVE



Supply Schedule

Price	Quantity
$0.00	0
0.50	0
1.00	1
1.50	2
2.00	3
2.50	4
3.00	5

SUPPLY AND DEMAND TOGETHER

Demand Schedule

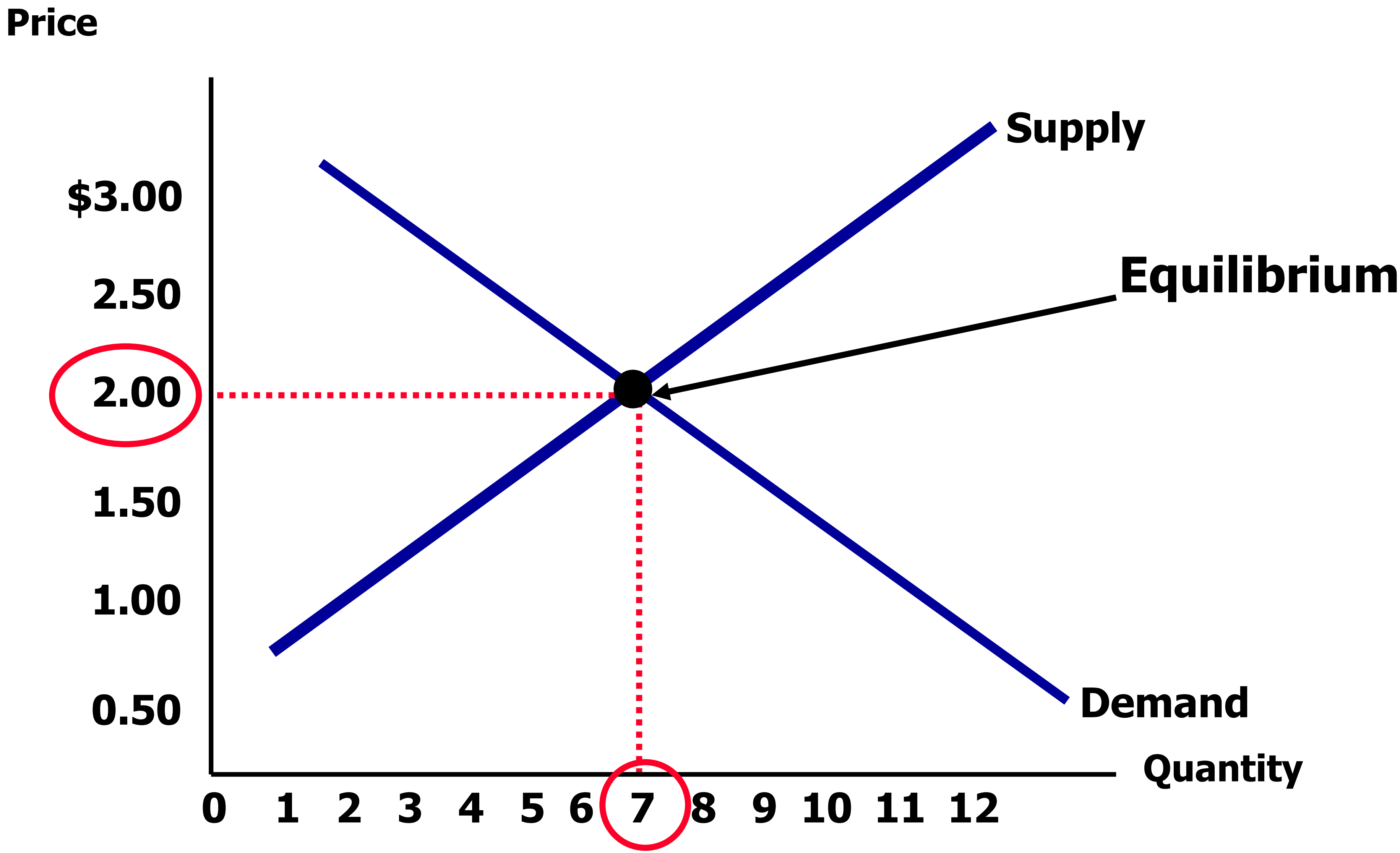
Price	Quantity
$0.00	19
0.50	16
1.00	13
1.50	10
2.00	7
2.50	4
3.00	1

Supply Schedule

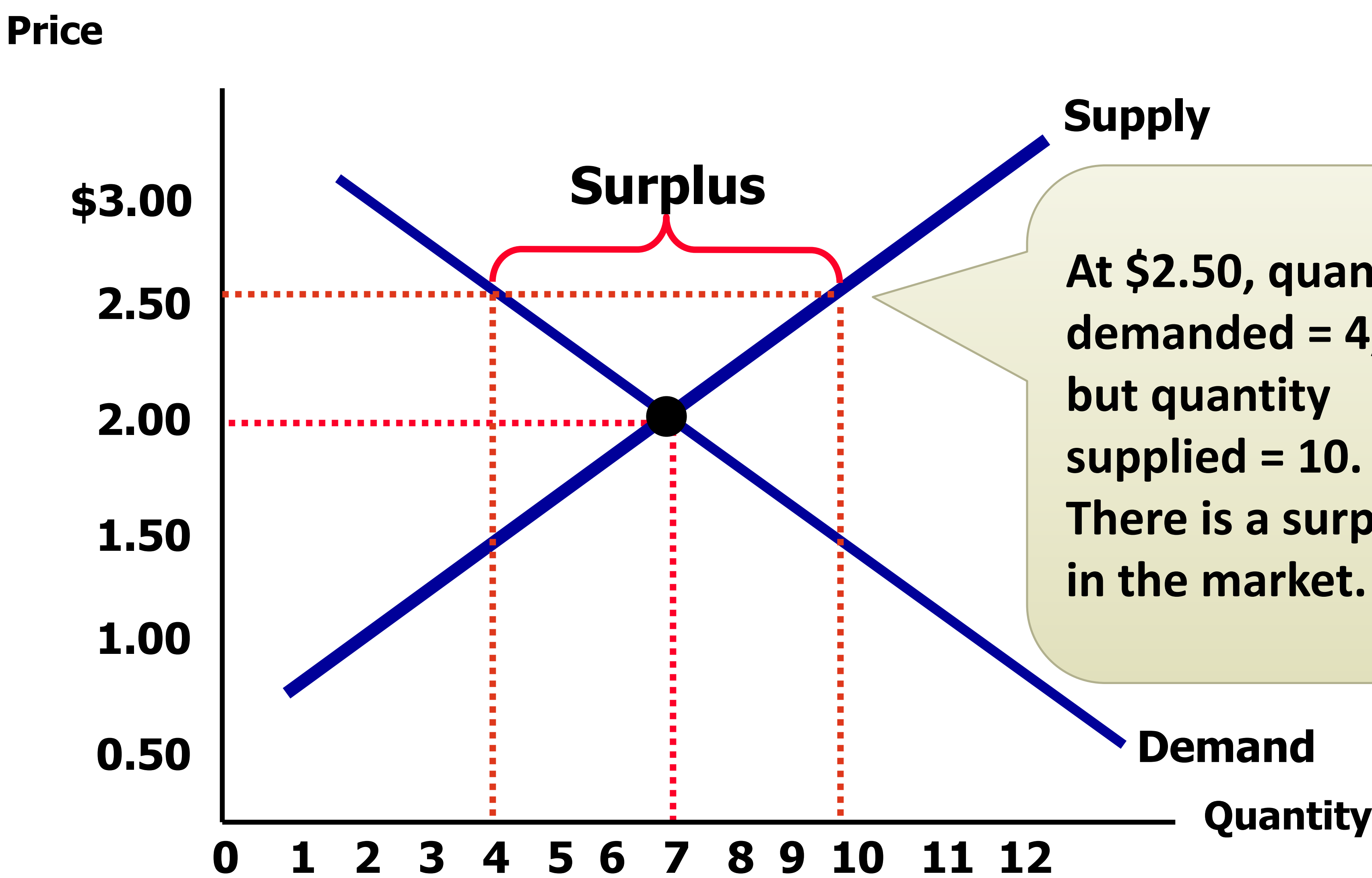
Price	Quantity
$0.00	0
0.50	0
1.00	1
1.50	4
2.00	7
2.50	10
3.00	13

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

EQUILIBRIUM OF SUPPLY AND DEMAND



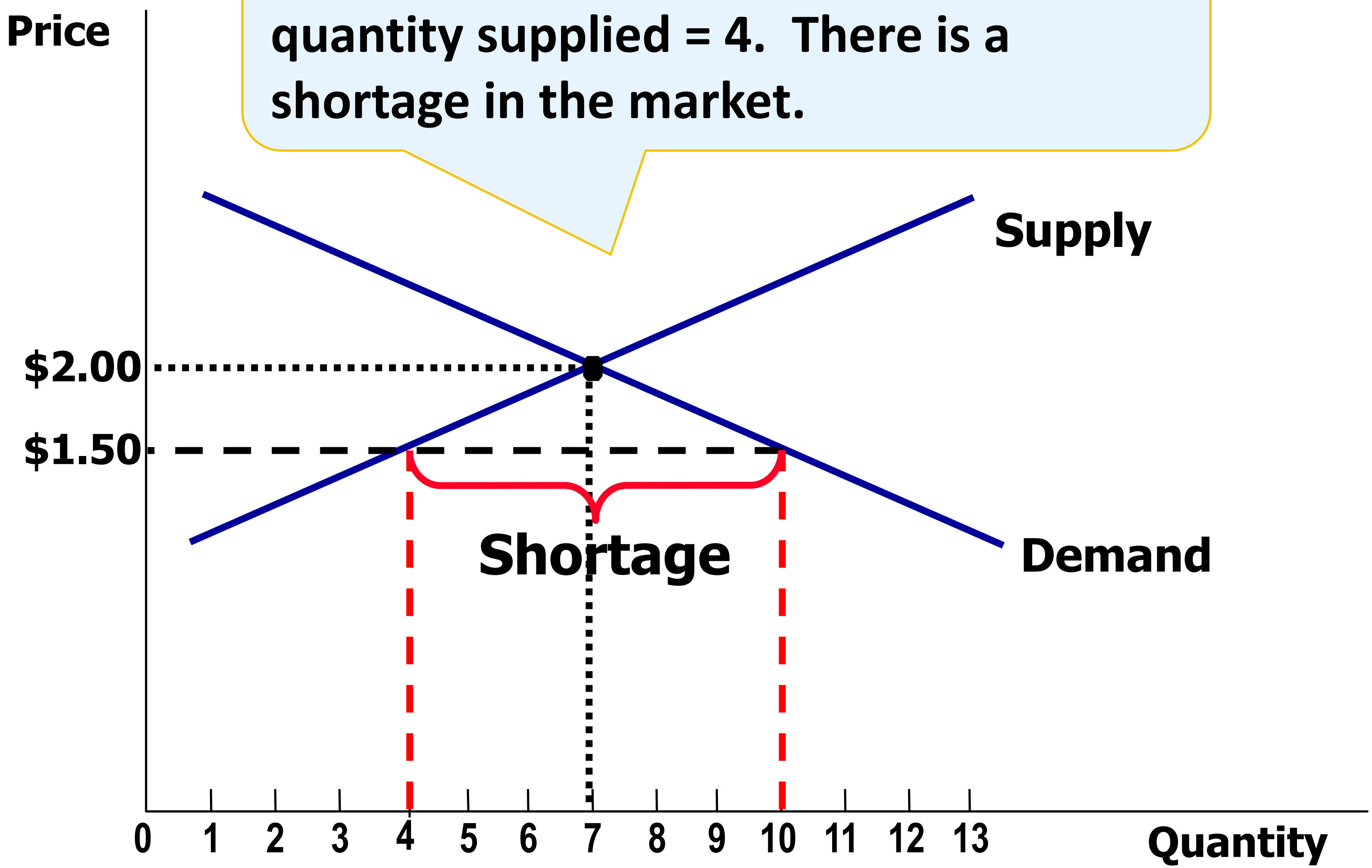
EXCESS SUPPLY



At $2.50, quantity demanded = 4, but quantity supplied = 10. There is a surplus in the market.

EXCESS DEMAND

At $1.50, quantity demanded = 10, but quantity supplied = 4. There is a shortage in the market.



EQUILIBRIUM & DISEQUILIBRIUM

Equilibrium

- **Means market has no tendency to change.**
  - Quantity demanded = Quantity supplied
  - No shortage or surplus.

Disequilibrium

- **Means market is <u>not</u> at rest.**
  - Tendency for market forces to adjust until new equilibrium is reached.

DISEQUILIBRIUM

Caused by:

- **Changes in Demand.**
  - New Demand Schedule
  - Shift in Demand Curve
- **Changes in Supply.**
  - New Supply Schedule.
  - Shift in Supply Curve

FACTORS THAT SHIFT THE DEMAND CURVE

1. Consumer Income
2. Consumer Wealth
3. Prices of related goods
4. Expected price or expected income.
5. Changing Tastes
6. Other variables

FACTORS THAT SHIFT THE DEMAND CURVE

1. Consumer Income

- The amount that an individual earns over a particular period

Normal good

- A good that people demand more of as their income rises

Inferior good

- A good that people demand less of as their income rises

EXAMPLES OF NORMAL AND INFERIOR GOODS

If your income increases you might buy more:

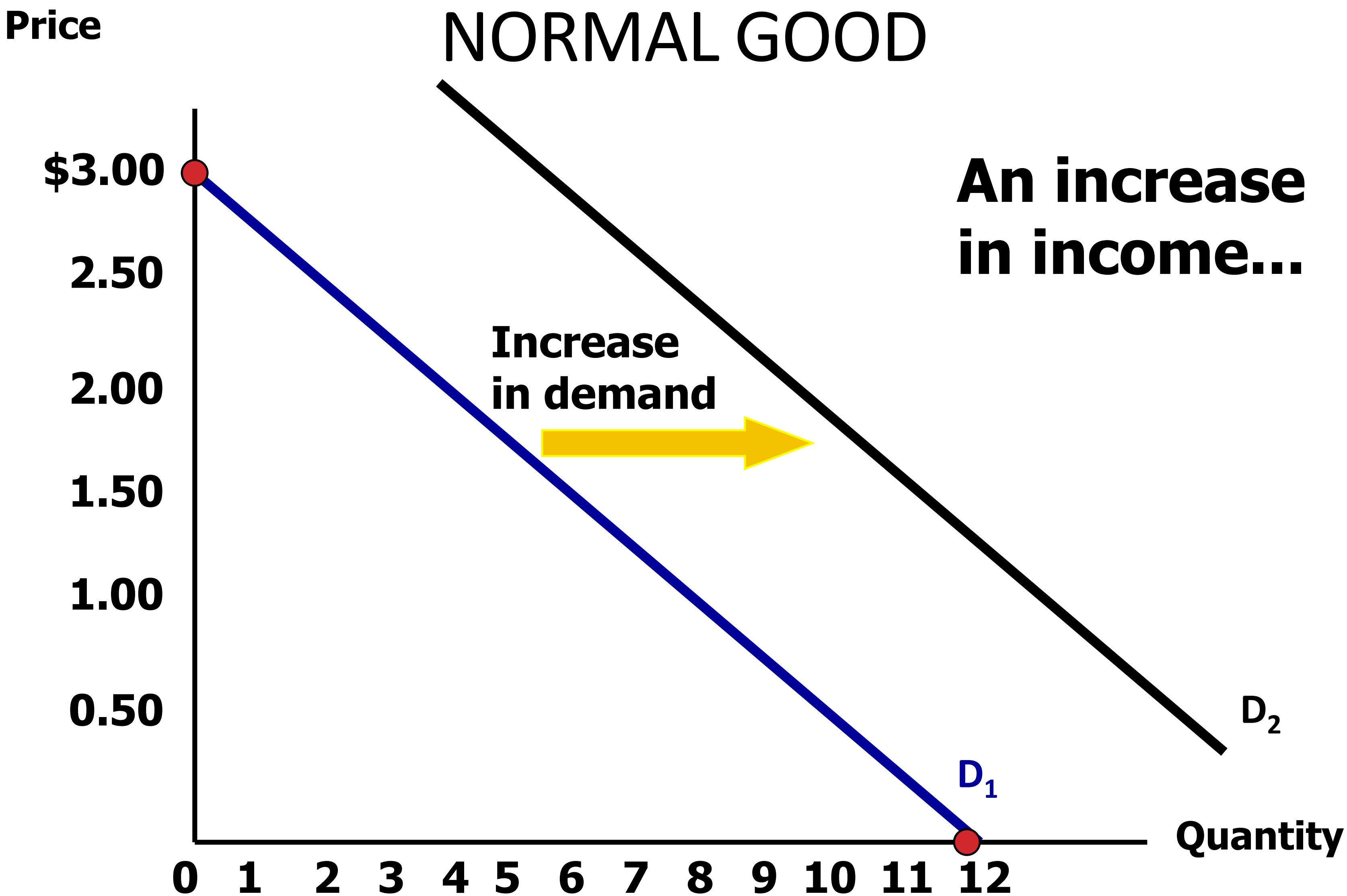
- Organic chicken
- A new car

If your income increases you might buy less:

- Top Ramen
- Clothing from Wal-Mart

CONSUMER INCOME

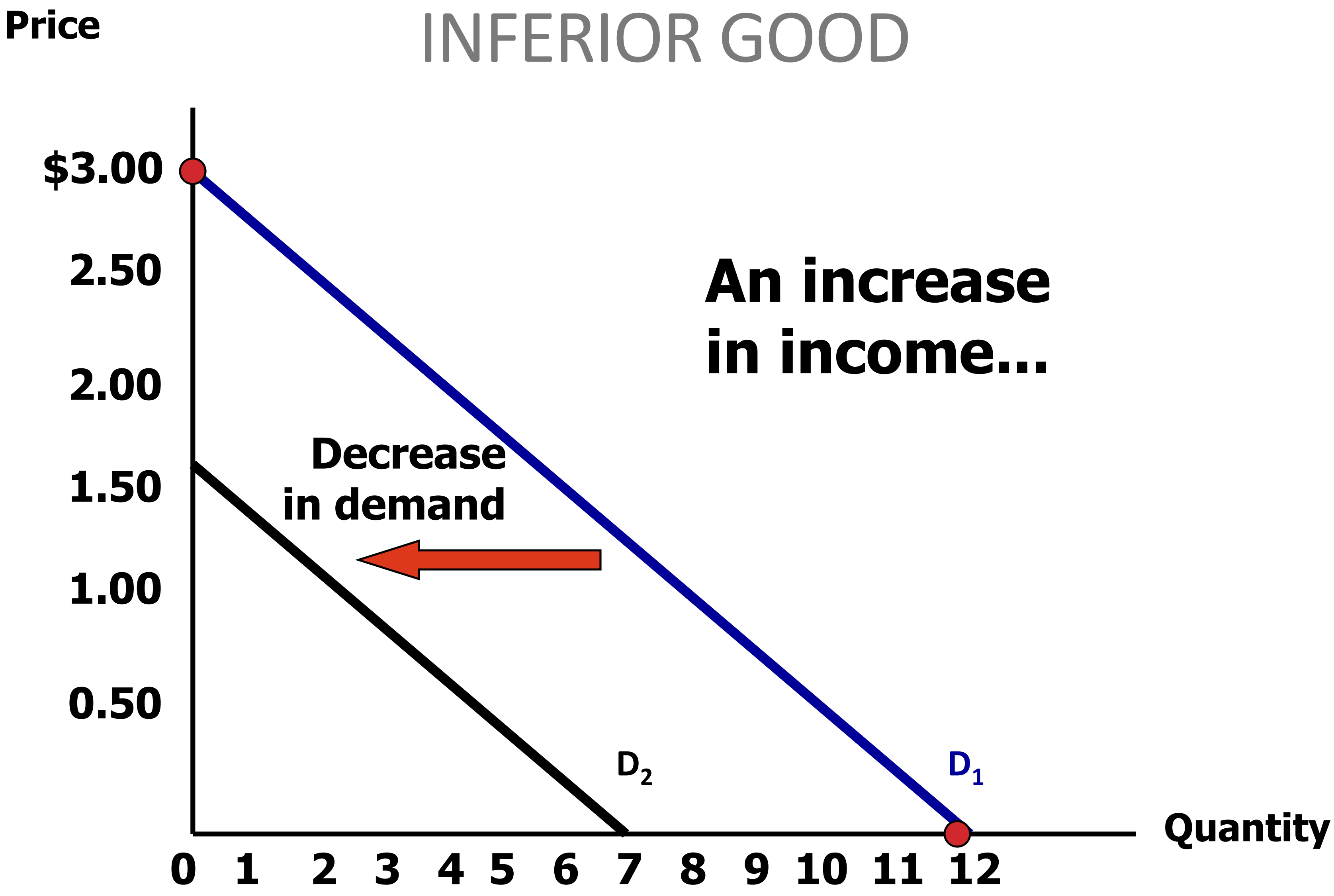
NORMAL GOOD



An increase in income…

CONSUMER INCOME

INFERIOR GOOD



FACTORS THAT SHIFT THE DEMAND CURVE

2. Consumer Wealth

= Net Worth = Assets – Liabilities (debts)

Increase in wealth

- Increases demand for a normal good
- Decreases demand for an inferior good

FACTORS THAT SHIFT THE DEMAND CURVE

3. Prices of related goods

Substitutes

- A good that is used in place of some other good
- An increase in the price of a good will tend to ***increase*** the demand for a substitute good.
    - Examples of substitutes: Coffee or tea, Hamburger or pizza

FACTORS THAT SHIFT THE DEMAND CURVE

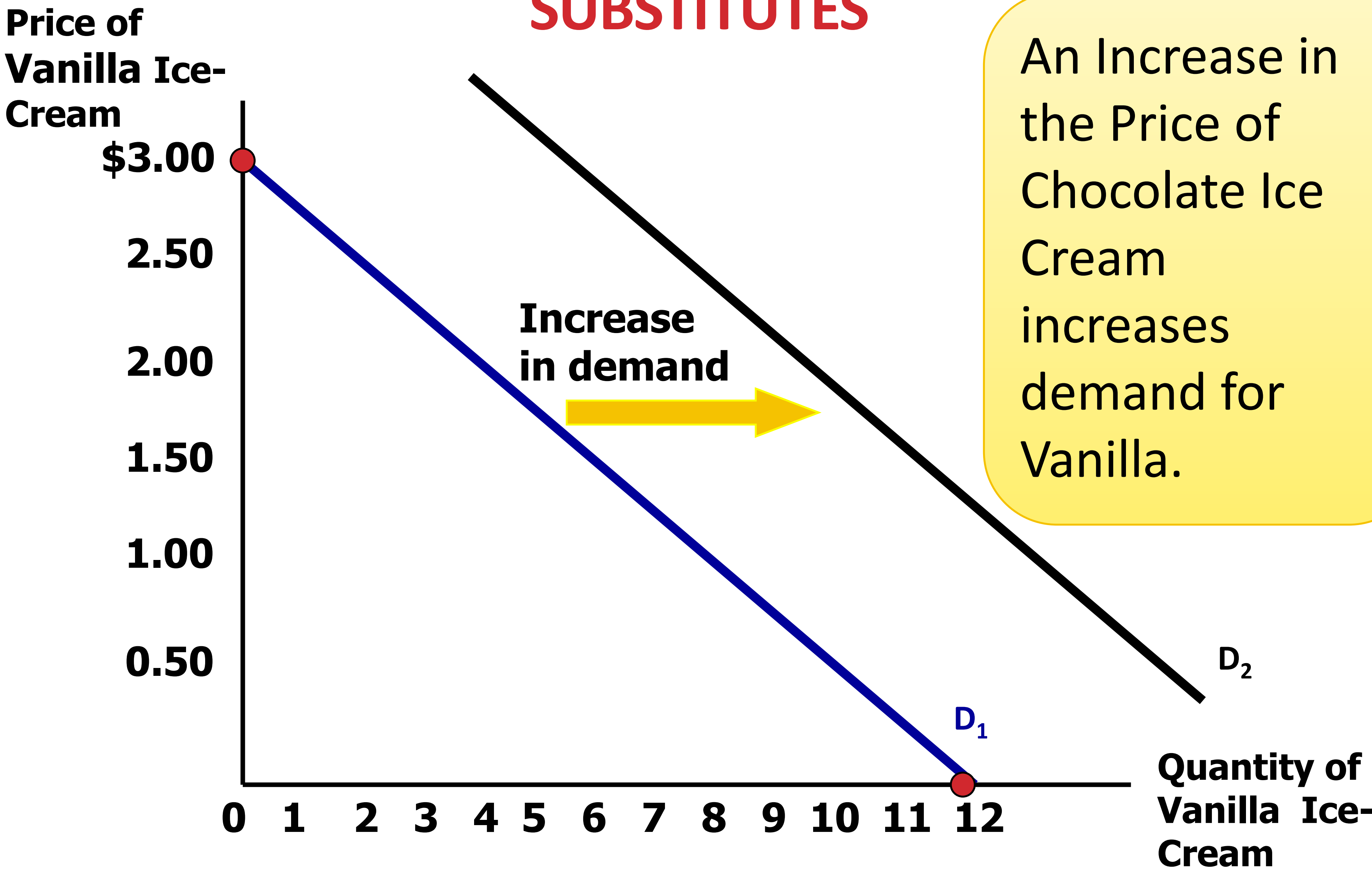
3. Prices of related goods

Complements

- A good that is used together with some other good
- An increase in the price of a good will tend to ***lower*** the demand for a complement.
- Examples of complements: batteries and toys, gasoline and big cars.

PRICES OF OTHER GOODS

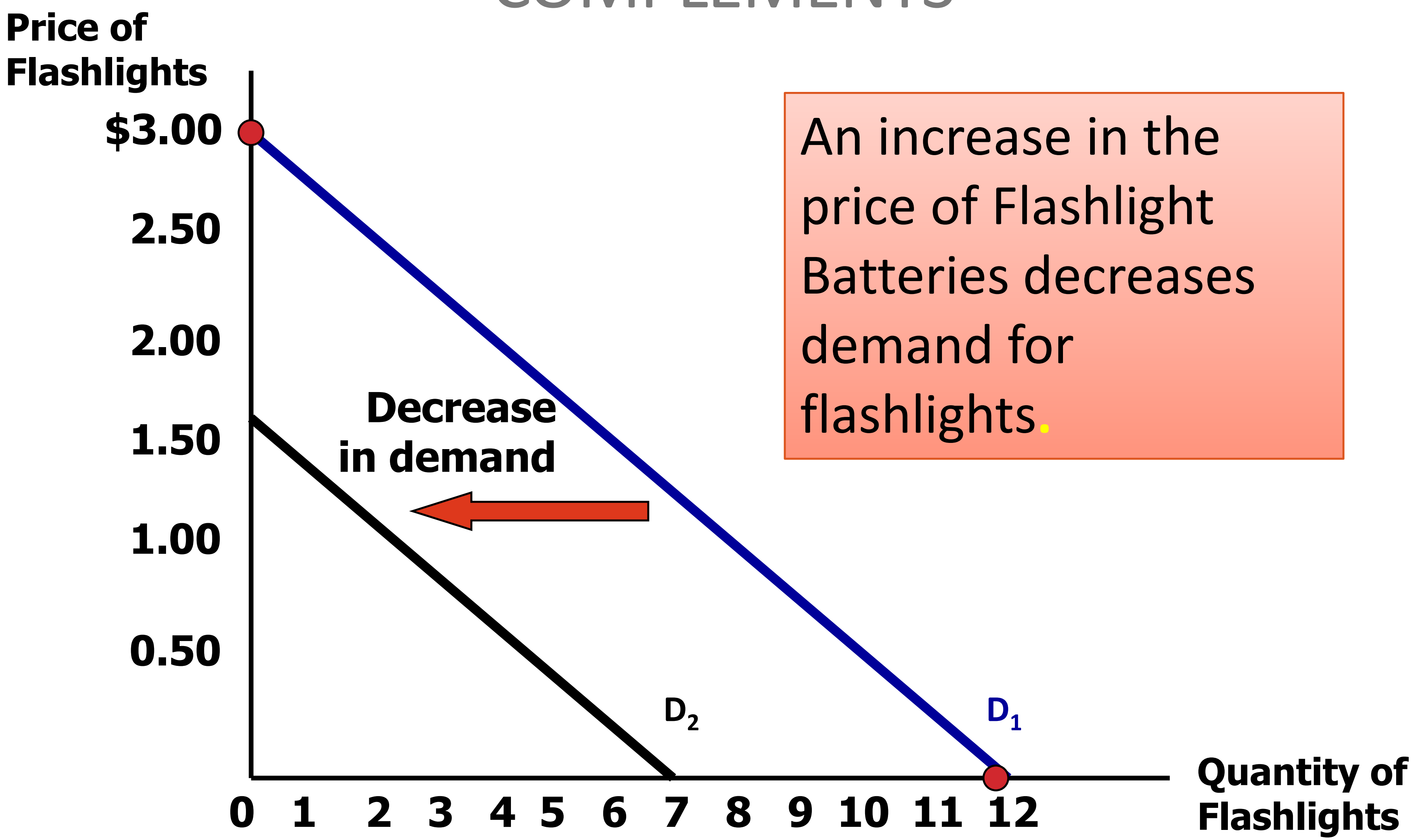
SUBSTITUTES



An Increase in the Price of Chocolate Ice Cream increases demand for Vanilla.

PRICES OF OTHER GOODS

COMPLEMENTS



An increase in the price of Flashlight Batteries decreases demand for flashlights.

FACTORS THAT SHIFT THE DEMAND CURVE

4. Expectations

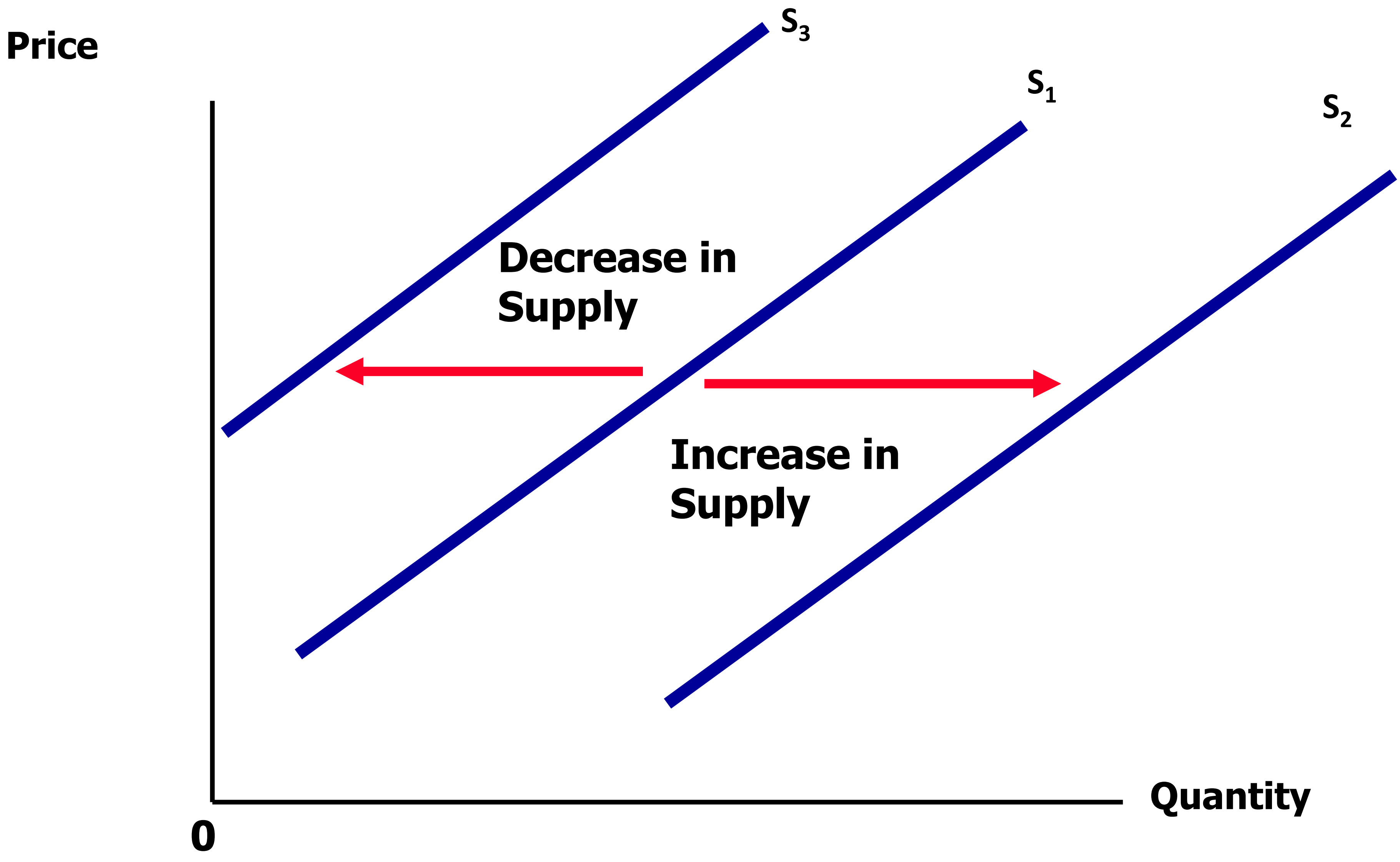
- Price will rise in the future?
  - Increases <u>current</u> demand.
- Price will fall in the future?
  - Decreases <u>current</u> demand.

FACTORS THAT SHIFT THE DEMAND CURVE

4. Expectations

- Income will rise in the future?
  - Increases <u>current</u> demand.
- Income will fall in the future?
  - Decreases <u>current</u> demand.

CHANGE IN SUPPLY



FACTORS THAT SHIFT THE SUPPLY CURVE

1. Input prices
2. Technology
3. Expected price
4. Changes in weather or other natural events

FACTORS THAT SHIFT THE SUPPLY CURVE

1. Input prices

- A fall in the price of an input will increase supply.
    - Price of cheese falls, cheese pizza costs less to produce. So firm will produce more at a given price.
- An increase in the price of an input will decrease supply

FACTORS THAT SHIFT THE SUPPLY CURVE

2. Technological advance in production

- A firm can produce a given level of output in a new and cheaper way than before
- Decreases costs of production, so firm will supply more at a given price.

FACTORS THAT SHIFT THE SUPPLY CURVE

3. Expected price

- An expectation of a future price rise will reduce current supply.
  - Firm will wait to supply more when the price is higher.
- An expectation of a future price drop will increase current supply.

FACTORS THAT SHIFT THE SUPPLY CURVE

4. Changes in weather and other natural events

- Favorable weather - increases crop yields
- Unfavorable weather - destroys crops
- Natural disasters destroy or disrupt productive capacity

SUPPLY

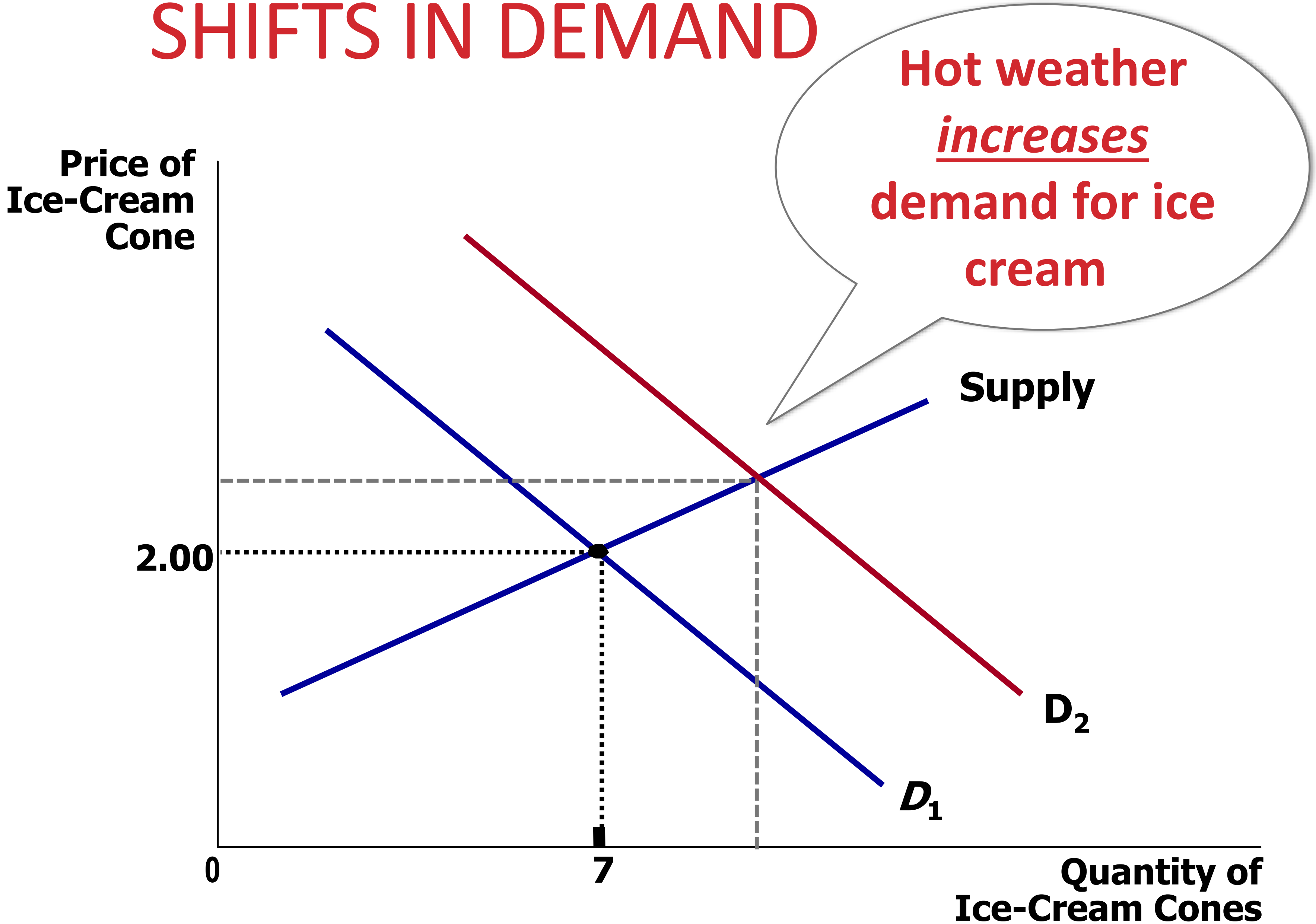
Basically, *anything* that affects profits will affect supply.

Profits = Revenues - Costs

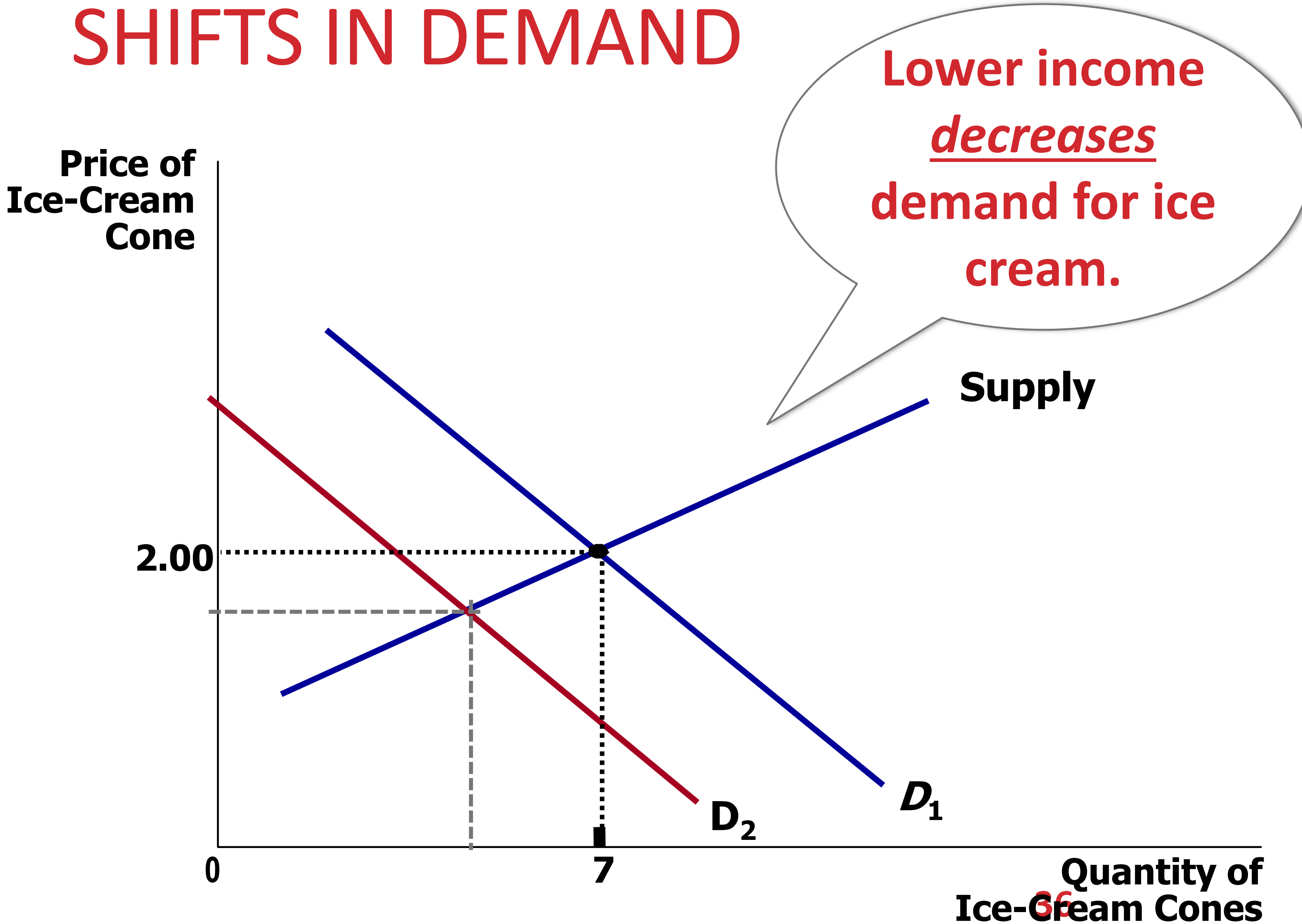
- Revenues = Sales
- Costs:
  - "inputs" – raw materials, labor, capital, rent, insurance, etc.

Higher profits = greater supply.

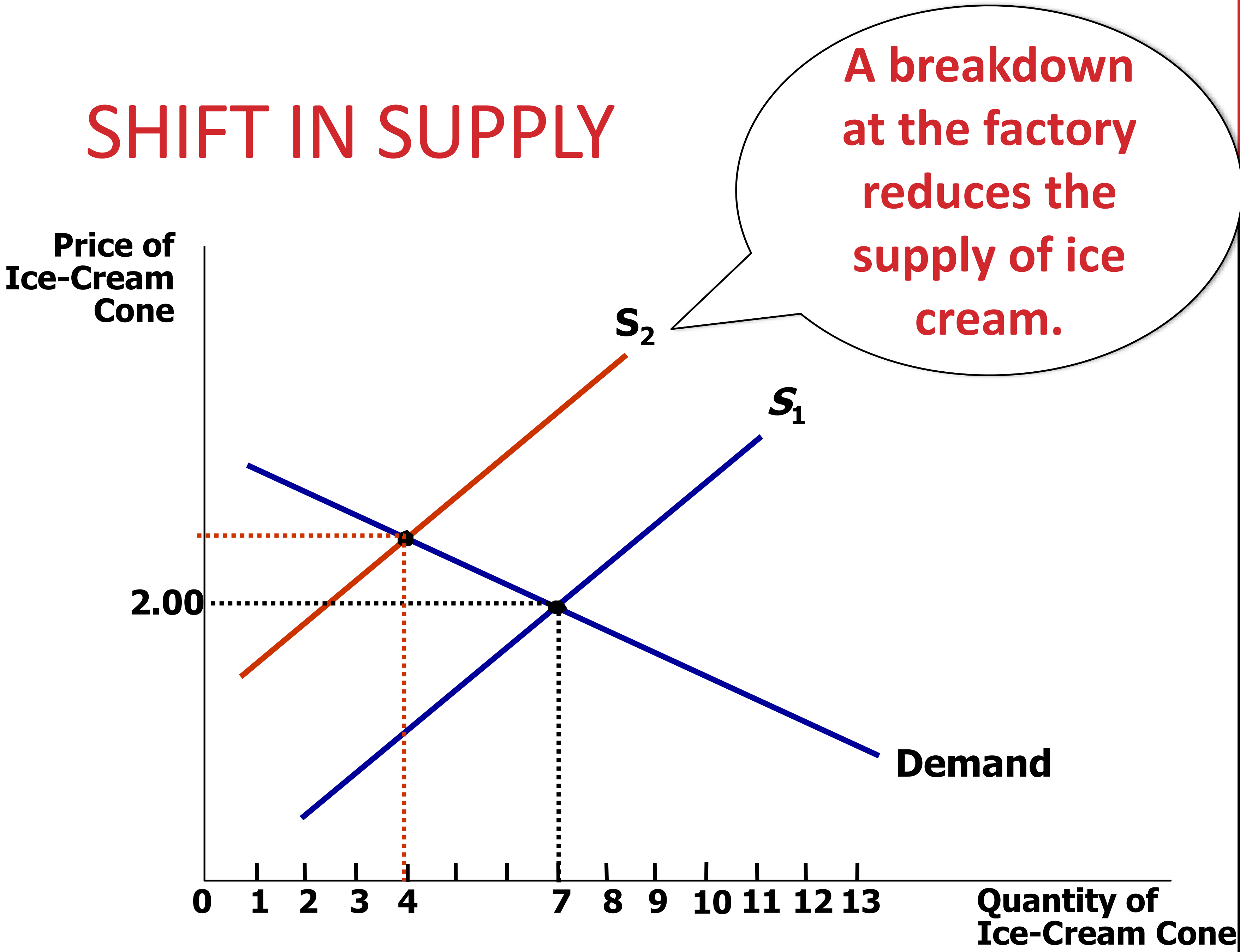
SHIFTS IN DEMAND



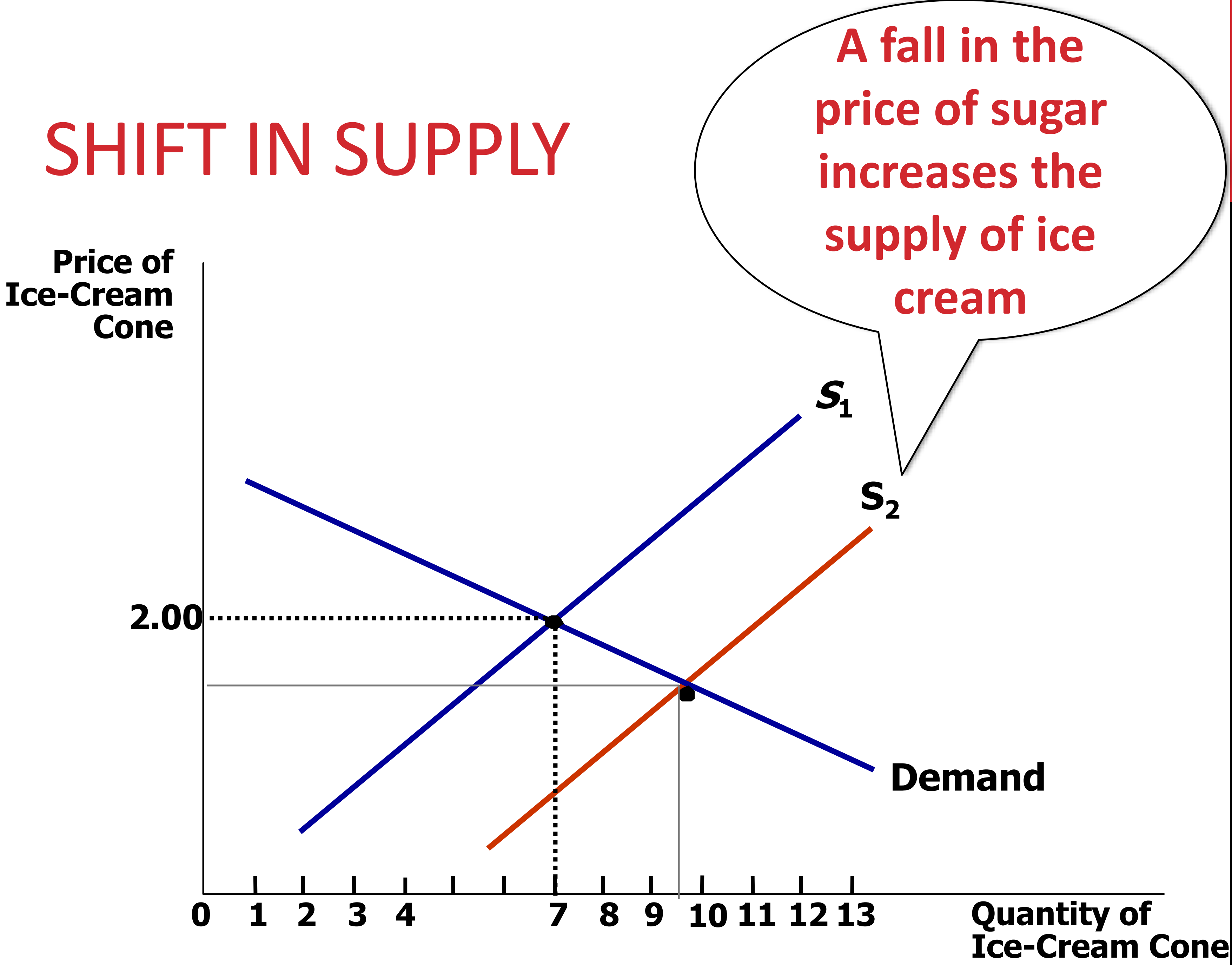
SHIFTS IN DEMAND



SHIFT IN SUPPLY



SHIFT IN SUPPLY



SHIFTS IN BOTH DEMAND & SUPPLY?

Not as clear cut. Forces are operating in opposite directions.

Example: S⇧ and D⇩

- S⇧ means P^e ⇧ and Q^e ⇩
- D⇩ means P^e ⇩ and Q^e ⇩
- Result: Quantity will fall, but price???

P^e = Equilibrium Price

Q^e = Equilibrium Quantity

SHIFTS IN BOTH DEMAND & SUPPLY?

Second Example: S⇧ and D⇧

- S⇧ means P^e ⇧ and Q^e ⇩
- D⇧ means P^e ⇧ and Q^e ⇧
- Price will rise, but quantity???