Demand, Supply and Market equilibrium

FIRMS AND HOUSEHOLDS:THE BASIC DECISION-MAKING UNITS

1) firm

An organization that **transforms resources (inputs) into products (outputs).**
Firms are the primary producing units in a market economy.
(**Industry**- combination of firm ; eg car – industry , Maruti – firm)

2) entrepreneur

A person who **organizes, manages, and assumes the risks** of a firm,
taking a **new idea or a new product** and turning it into a successful business.

3) households

The **consuming units** in an economy. (avg household size in india is 4.5)

INPUT MARKETS AND OUTPUT MARKETS:THE CIRCULAR FLOW

4) product or output markets

The markets in which **goods and services** are exchanged.

5) input or factor markets

The markets in which the **resources** used to produce products are exchanged.
(eg-land,labour,,capital)

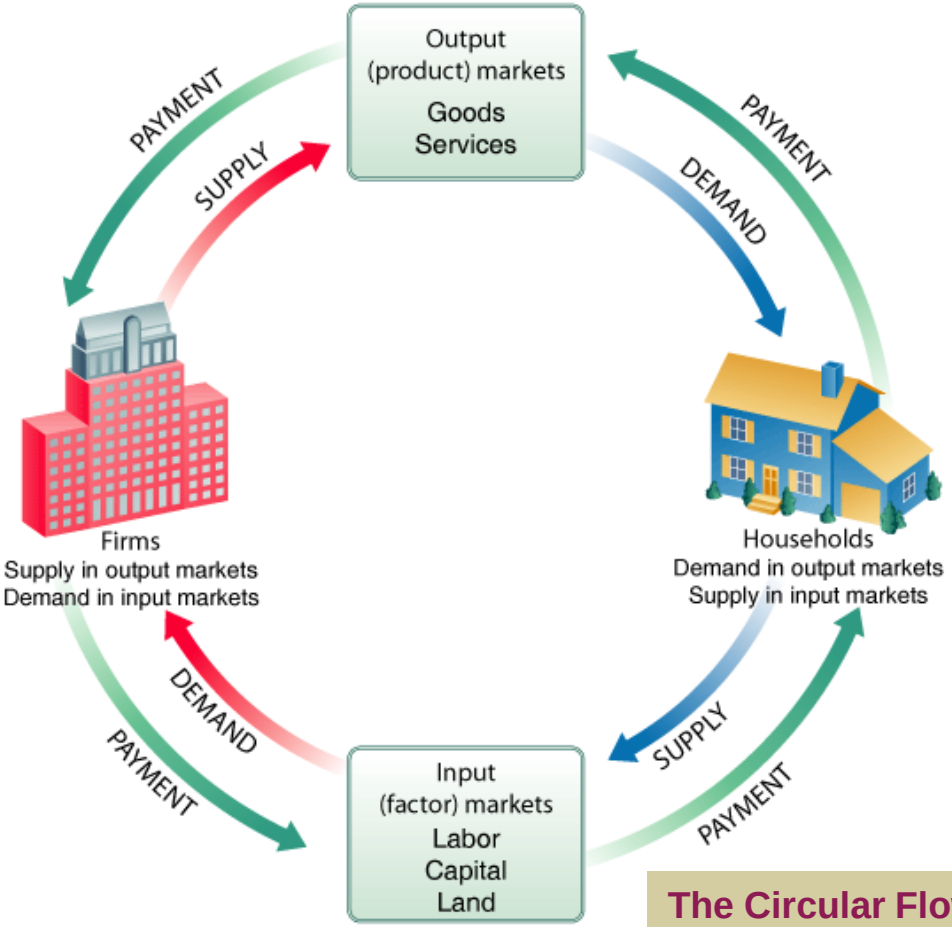
6) labor market

The input/factor market in which **households supply work for wages** to firms that demand labor.

7) capital market

The input/factor market in which **households supply their savings**, for interest or for claims to future profits, to firms that demand funds to buy capital goods.

INPUT MARKETS AND OUTPUT MARKETS:THE CIRCULAR FLOW



The Circular Flow of Economic Activity

8) land market

The input/factor market in which **households supply land** or other real property in exchange for **rent.**

9) factors of production

The inputs into the production process. **Land, labor, and capital** are the three key factors of production. (4th one is enterprenurship)

Input and output markets are connected through the behavior of both firms and households.
Firms determine the quantities and character of outputs produced and the types of quantities of inputs demanded.
Households determine the types and quantities of products demanded and the quantities and types of inputs supplied.

(1) DEMAND IN PRODUCT/OUTPUT MARKETS

A household's decision about what quantity of a particular output, or product, to demand depends on a number of factors including:

- The ***price*** *of the product* in question
- The ***income available*** to the household
- The household's *amount of* ***accumulated wealth***
- The ***prices of other products*** available to the household
- The household's ***tastes and preferences***
- The household's ***expectations*** about future income, wealth, and prices
- age , gender , distribution of income

Real demand – 1. u need it 2. u ve capability to buy 3. u ve plan to buy it

10) quantity demanded

The **amount (number of units)** of a product that a household would buy in a given period if it could buy all it wanted at the **current market price.**

CHANGES IN QUANTITY DEMANDED VERSUS CHANGES IN DEMAND

The most important relationship in individual markets is that between market price and quantity demanded.

Changes in the price of a product affect the *quantity demanded* per period.
Changes in any other factor, such as income or preferences, affect *demand*.
Thus, we say that an increase in the price of Coca-Cola is likely to cause a decrease in the *quantity of Coca-Cola demanded*.
However, we say that an increase in income is likely to cause an increase in the demand for most goods.

PRICE AND QUANTITY DEMANDED: THE LAW OF DEMAND

11) demand schedule

A **table** showing how much of a given product a household would be willing to buy at different prices.

TABLE 1 Anna's Demand Schedule for Telephone Calls

PRICE (PER CALL)	QUANTITY DEMANDED (CALLS PER MONTH)
$ 0	30
.50	25
3.50	7
7.00	3
10.00	1
15.00	0

12) demand curve

A **graph** illustrating how much of a given product a household would be willing to buy at different prices.

Demand Curves Slope Downward

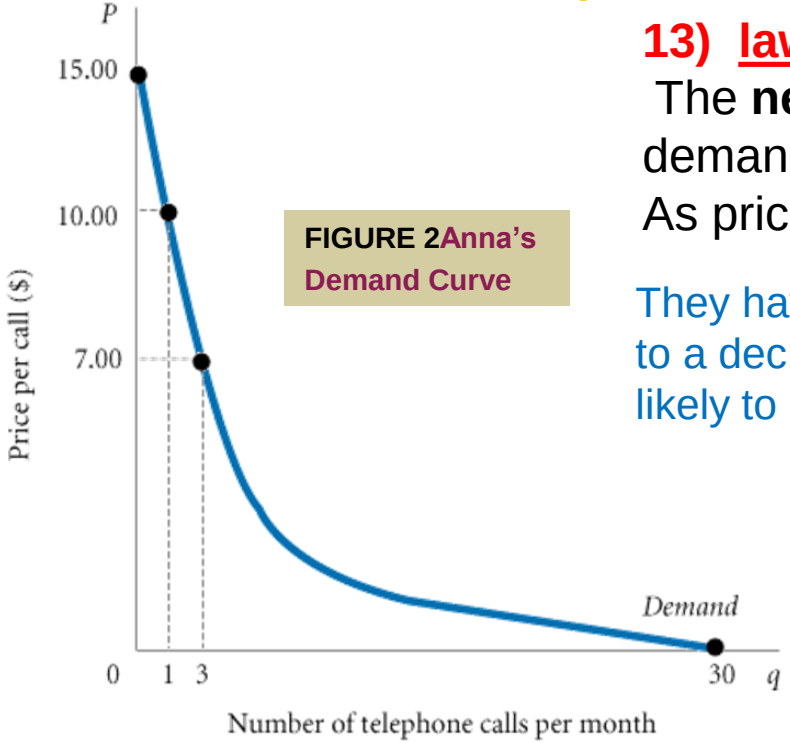


FIGURE 2 Anna's Demand Curve

13) law of demand

The **negative relationship** between **price** and **quantity** demanded: As price rises, quantity demanded decreases. As price falls, quantity demanded increases.

They have a **negative slope**. An increase in price is likely to lead to a decrease in quantity demanded, and a decrease in price is likely to lead to an increase in quantity demanded.

It is reasonable to expect quantity demanded to fall when price rises, ceteris paribus,(meaning- other things remmaning constant)
and to expect quantity demanded to rise when price falls, ceteris paribus.
Demand curves have a negative slope.

OTHER DETERMINANTS OF HOUSEHOLD DEMAND

14) income

The sum of all a household's **wages, salaries, profits, interest** payments, **rents**, and other forms of earnings in a given period of time. It is a flow measure.

15) wealth or net worth

The total value of what a household owns minus what it owes.
It is a stock measure.

16) normal goods

Goods for which demand goes up when income is higher and for which demand goes down when income is lower.

17) inferior goods

Goods for which demand tends to fall when income rises. (eg- oil – ruchi oil)

18) substitutes

Goods that can serve as **replacements** for one another:
when the price of one increases, demand for the other goes up.

19) perfect substitutes

Identical products.

Perfect substitutes? On a hot day in the desert, one brand is as good as another.

20) complements, complementary goods

Goods that "**go together**":
a decrease in the price of one results in an increase in demand for the other, and vice versa. (e.g. Car and Petrol , tea and sugar ,ink and pen)

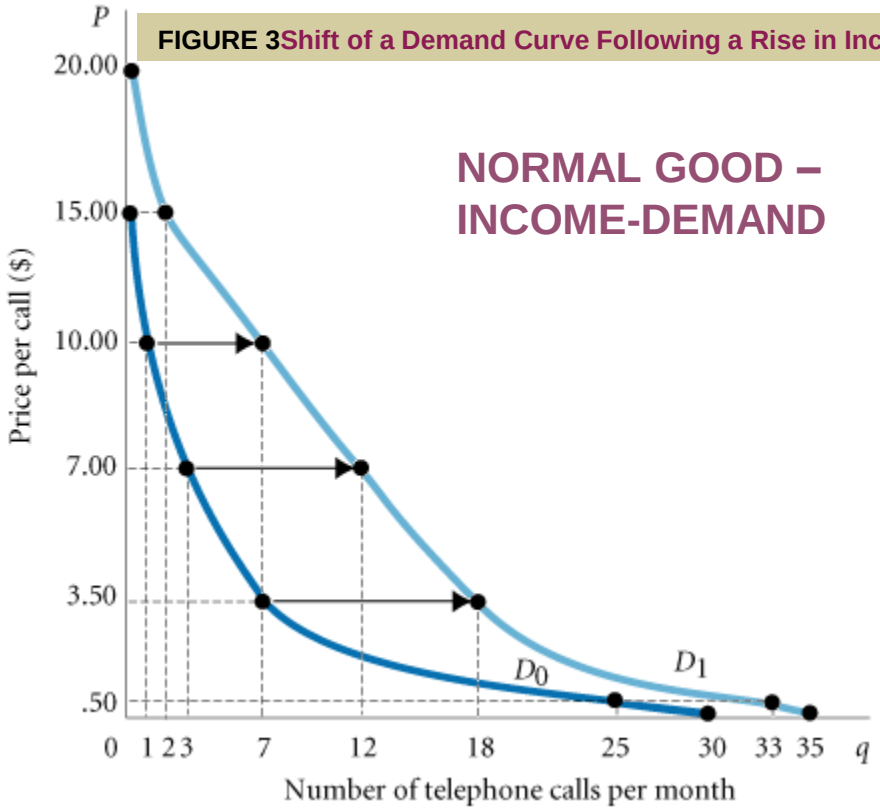
Tastes and Preferences **Expectations** **(if I expect price to increase , ill buy stock)**

SHIFT OF DEMAND VERSUS MOVEMENT ALONG A DEMAND CURVE

TABLE 3. Shift of Anna's Demand Schedule Due to increase in Income

Price (Per Call)	SCHEDULE D_0 Quantity Demanded (Calls Per Month at an Income of $300 Per Month)	SCHEDULE D_1 Quantity Demanded (Calls Per Month at an Income of $600 Per Month)
$ 0	30	35
.50	25	33
3.50	7	18
7.00	3	12
10.00	1	7
15.00	0	2
20.00	0	0

FIGURE 3 Shift of a Demand Curve Following a Rise in Income



NORMAL GOOD – INCOME-DEMAND

21) shift of a demand curve

The change that takes place in a demand curve corresponding to a new relationship between quantity demanded of a good and price of that good.
The shift is brought about by a change in the original conditions.(EG- income change)

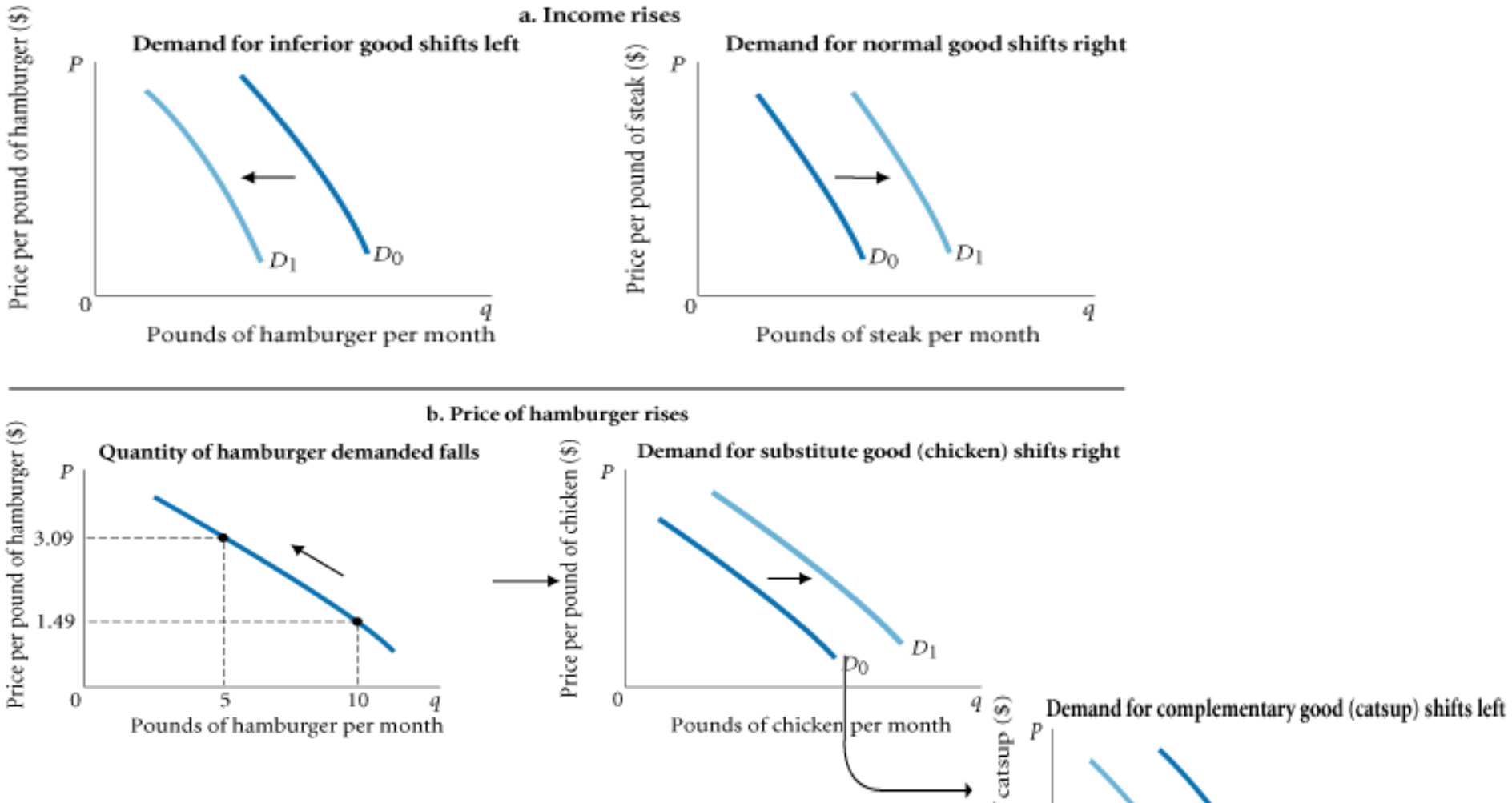
22) movement along a demand curve

The change in quantity demanded brought about by a change in **price**.

23) market demand

The **sum of all the quantities of a good or service** demanded per period by all the households buying in the market for that good or service.

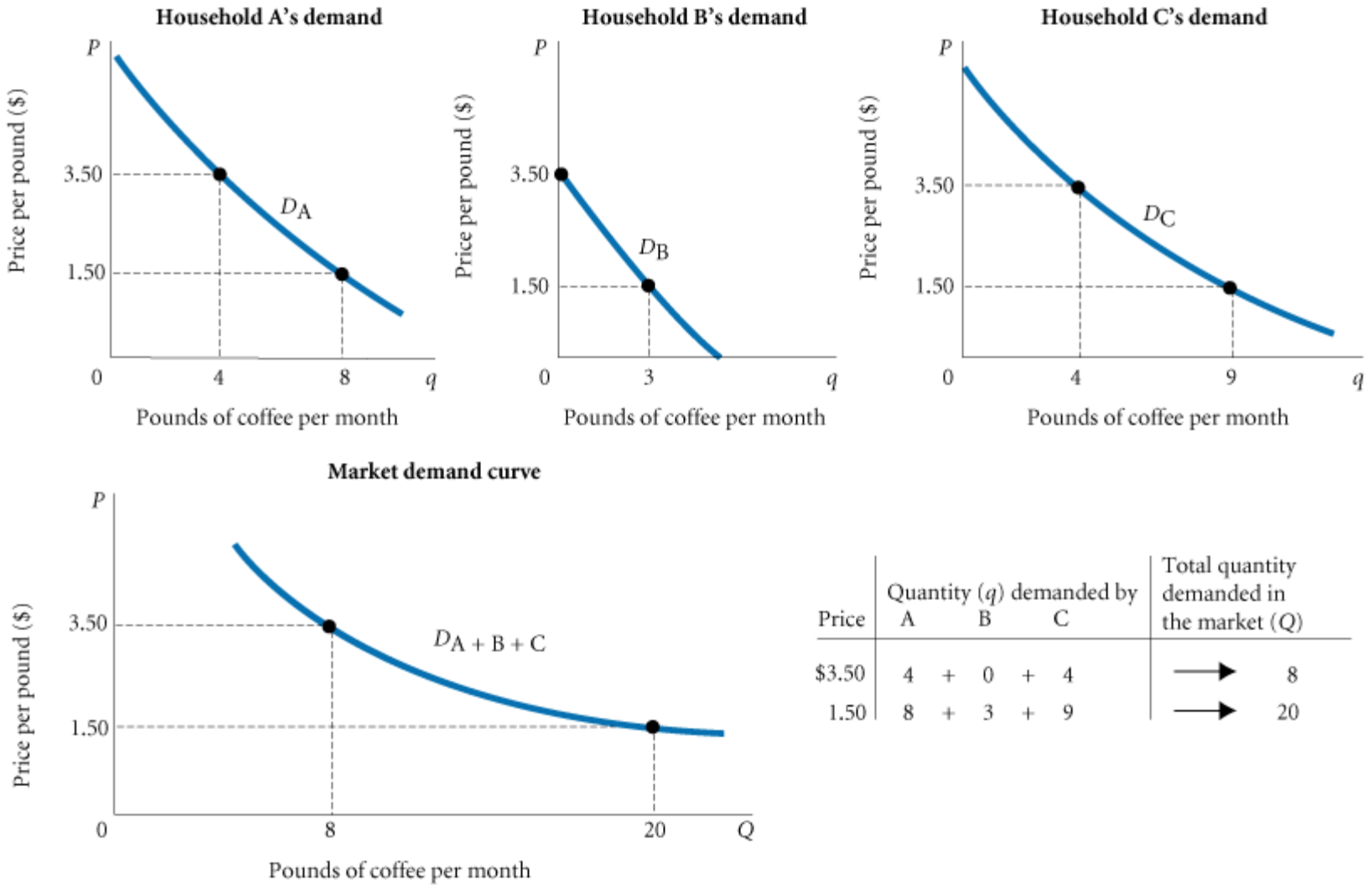
FIGURE 4 **Shifts versus Movement along a Demand Curve**



Change in price of a good or service
leads to
Change in *quantity demanded* (movement along the demand curve).

Change in income, preferences, or prices of other goods or services
leads to
Change in *demand* (shift of the demand curve).

FIGURE 5 Deriving Market Demand from Individual Demand Curves



Price	Quantity (q) demanded by A	B	C	Total quantity demanded in the market (Q)
$3.50	4 +	0 +	4	→ 8
1.50	8 +	3 +	9	→ 20

Market demand-addition of indivisual demands

(2) SUPPLY IN PRODUCT/OUTPUT MARKETS

Successful firms make profits because they are able to sell their products for more than it costs to produce them.

24) profit (revenue-cost)

The difference between revenues and costs.

25) quantity supplied (if price inc , qnty inc)

The **amount** of a particular product that a firm would be willing and able to offer for sale at a **particular price** during a given time period.

26) law of supply

The **positive relationship between price and quantity** of a good supplied: An increase in market price will lead to an increase in quantity supplied, and a decrease in market price will lead to a decrease in quantity supplied.

28) OTHER DETERMINANTS OF SUPPLY

a) The Cost of Production

Regardless of the price that a firm can command for its product, revenue must exceed the cost of producing the output for the firm to make a profit.

b) The Prices of Related Products

A soybean farm is a producer that supplies soybeans to the market.

28) supply schedule

A **table** showing how much of a product firms will sell at different prices.

29) supply curve

A **graph** illustrating how much of a product a firm will sell at different prices.

TABLE 3.3 Clarence Brown's Supply Schedule for Soybeans

PRICE (PER BUSHEL)	QUANTITY SUPPLIED (BUSHELS PER MONTH)
$1.50	0
1.75	10,000
2.25	20,000
3.00	30,000
4.00	45,000
5.00	45,000

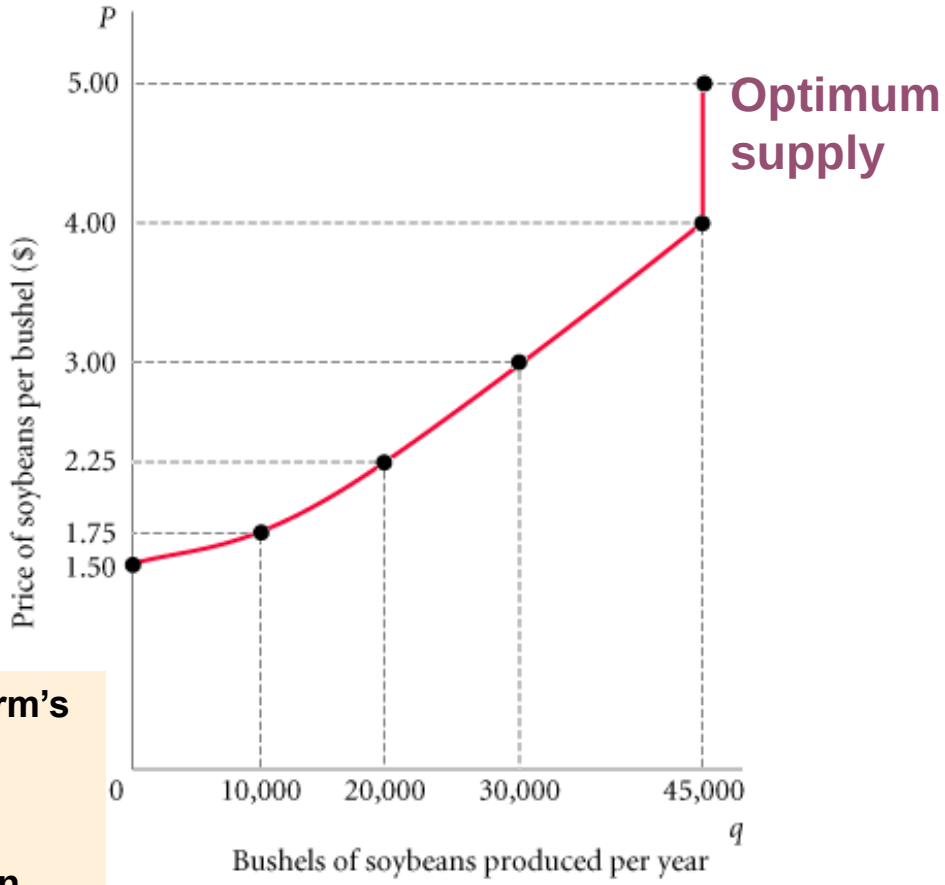


FIGURE 6 Clarence Brown's Individual Supply Curve

Assuming that its objective is to maximize profits, a firm's decision about what quantity of output, or product, to supply depends on

1. **The price of the good or service**
2. **The cost of producing the product, which in turn depends on**
   - **The price of required inputs (labor-wage, capital-intrest, and land-rate)**
   - **The technologies that can be used to produce the product**
3. **The prices of related products**

SHIFT OF SUPPLY VERSUS MOVEMENT ALONG A SUPPLY CURVE

30) movement along a supply curve

The change in quantity supplied brought about by a change in price.

31) shift of a supply curve

The change that takes place in a supply curve corresponding to a new relationship between quantity supplied of a good and the price of that good. The shift is brought about by a change in the original conditions.

As with demand, it is very important to distinguish between movements along supply
curves (changes in quantity supplied) and shifts in supply curves (changes in supply):

Change in price of a good or service
leads to
Change in *quantity supplied* (movement along a supply curve).

Change in income, preferences, or prices of other goods or services
leads to
Change in *supply* (shift of a supply curve).

32) market supply

The sum of all that is supplied each period by all producers of a single product.

SUPPLY IN PRODUCT/OUTPUT MARKETS

TABLE 3 Shift of Supply Schedule for Soybeans Following Development of a New Disease-Resistant Seed Strain

	SCHEDULE D_0	SCHEDULE D_1
Price (Per Bushel)	Quantity Supplied (Bushels Per Year Using Old Seed)	Quantity Supplied (Bushels Per Year Using New Seed)
$1.50	0	5,000
1.75	10,000	23,000
2.25	20,000	33,000
3.00	30,000	40,000
4.00	45,000	54,000
5.00	45,000	54,000

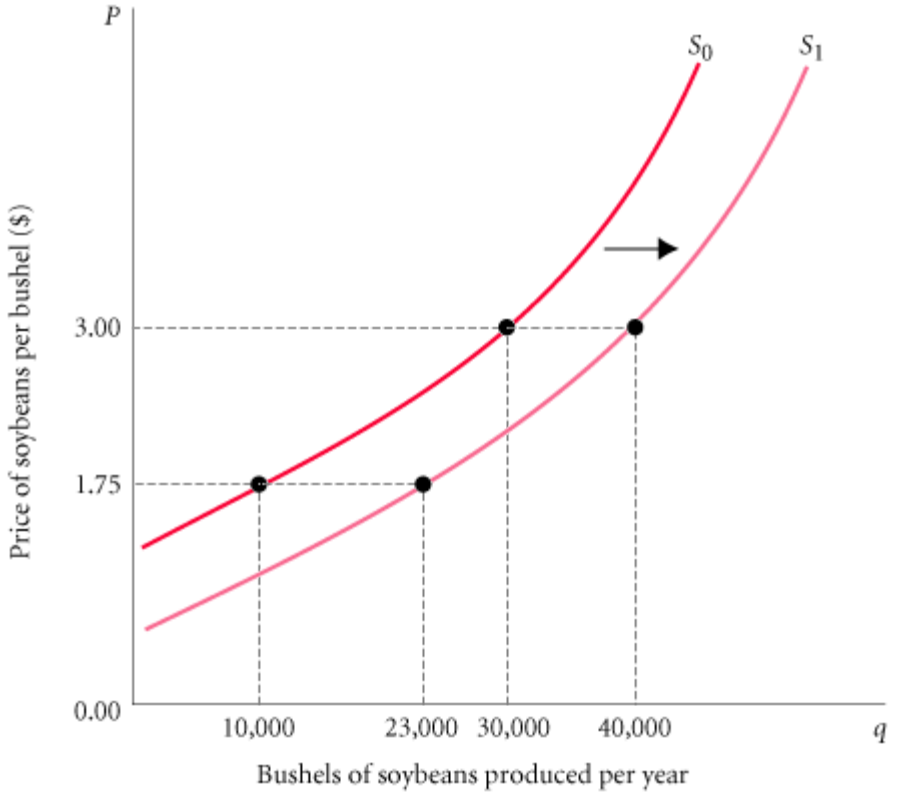
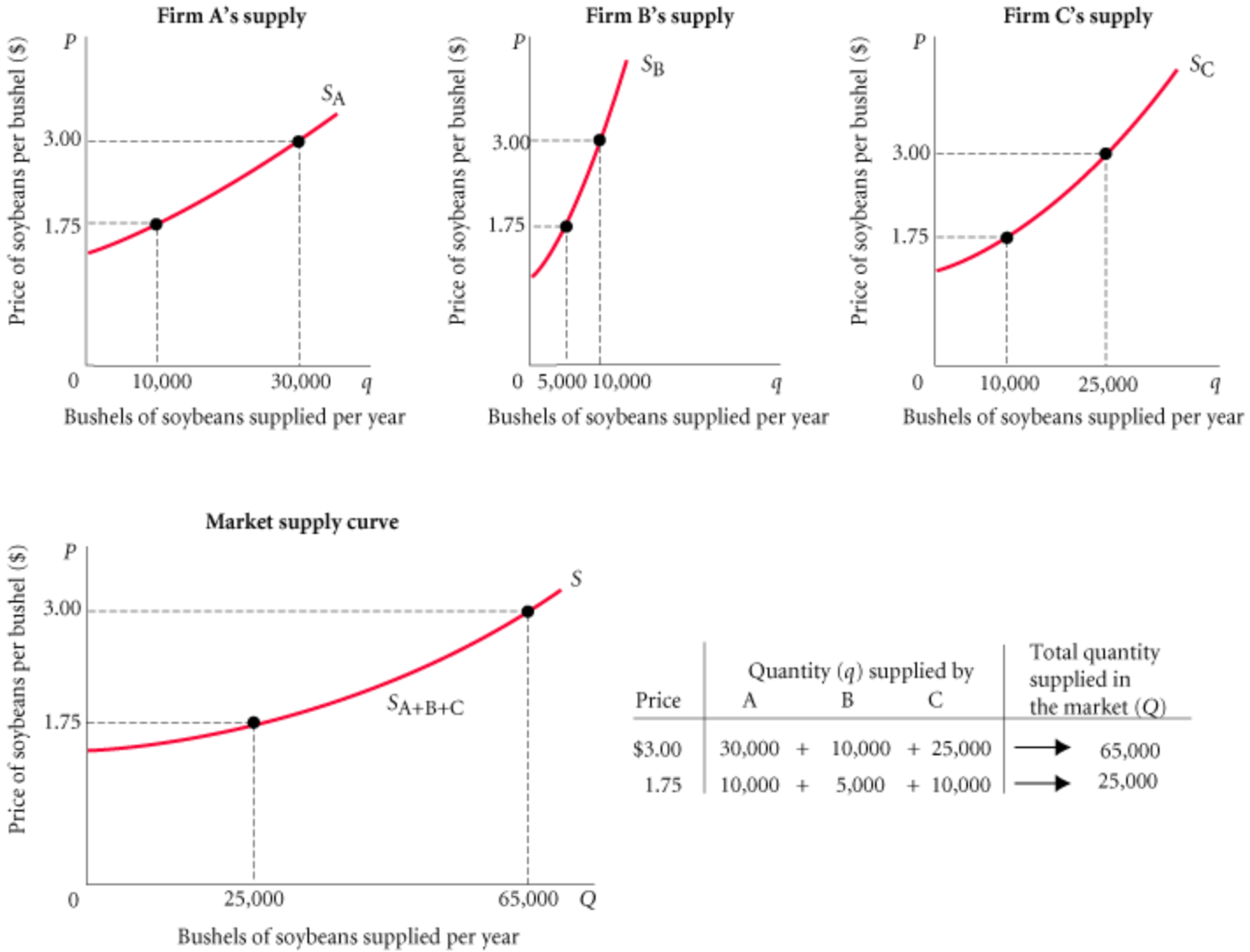


FIGURE 3 Shift of Supply Curve for Soybeans Following Development of a New Seed Strain

SUPPLY IN PRODUCT/OUTPUT MARKETS



Price	Quantity (q) supplied by A	B	C	Total quantity supplied in the market (Q)
$3.00	30,000 +	10,000 +	25,000	→ 65,000
1.75	10,000 +	5,000 +	10,000	→ 25,000

FIGURE 8 Deriving Market Supply from Individual Firm Supply Curves

(3) MARKET EQUILIBRIUM

33) equilibrium

The condition that exists when **quantity supplied and quantity demanded are equal**. At equilibrium, there is no tendency for price to change.

34) excess demand or shortage

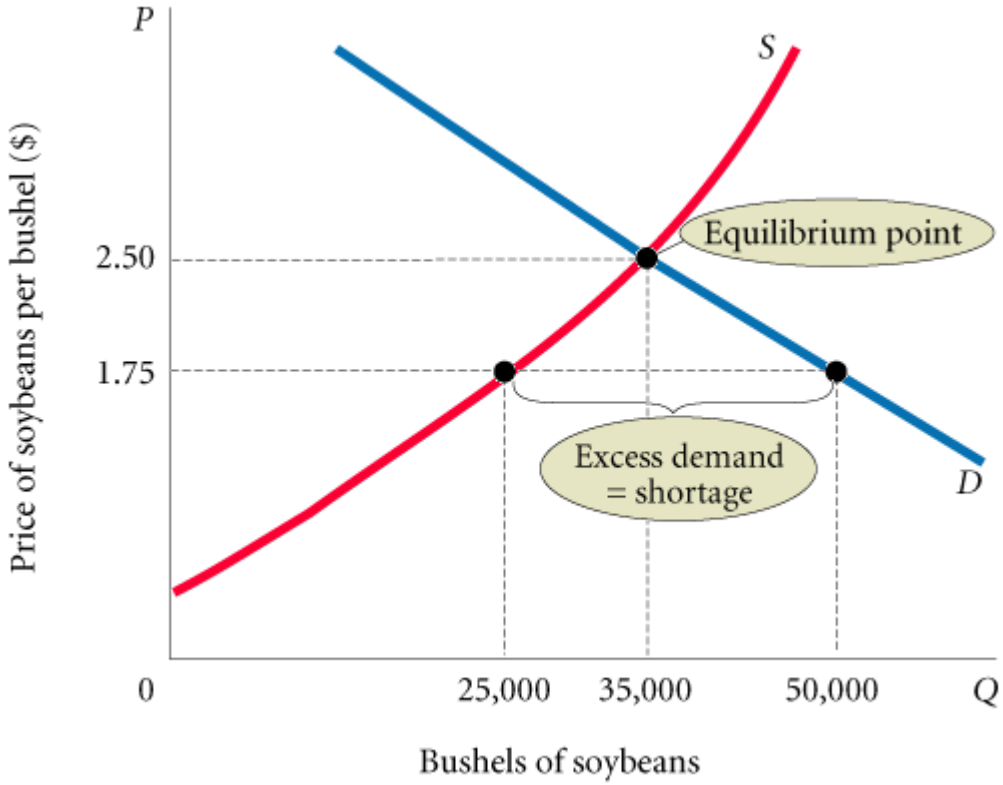
The condition that exists when quantity demanded exceeds quantity supplied at the current price.

Bidding at an auction starts with excess demand and ends up with quantity demanded and quantity supplied equal.

35) excess supply or surplus

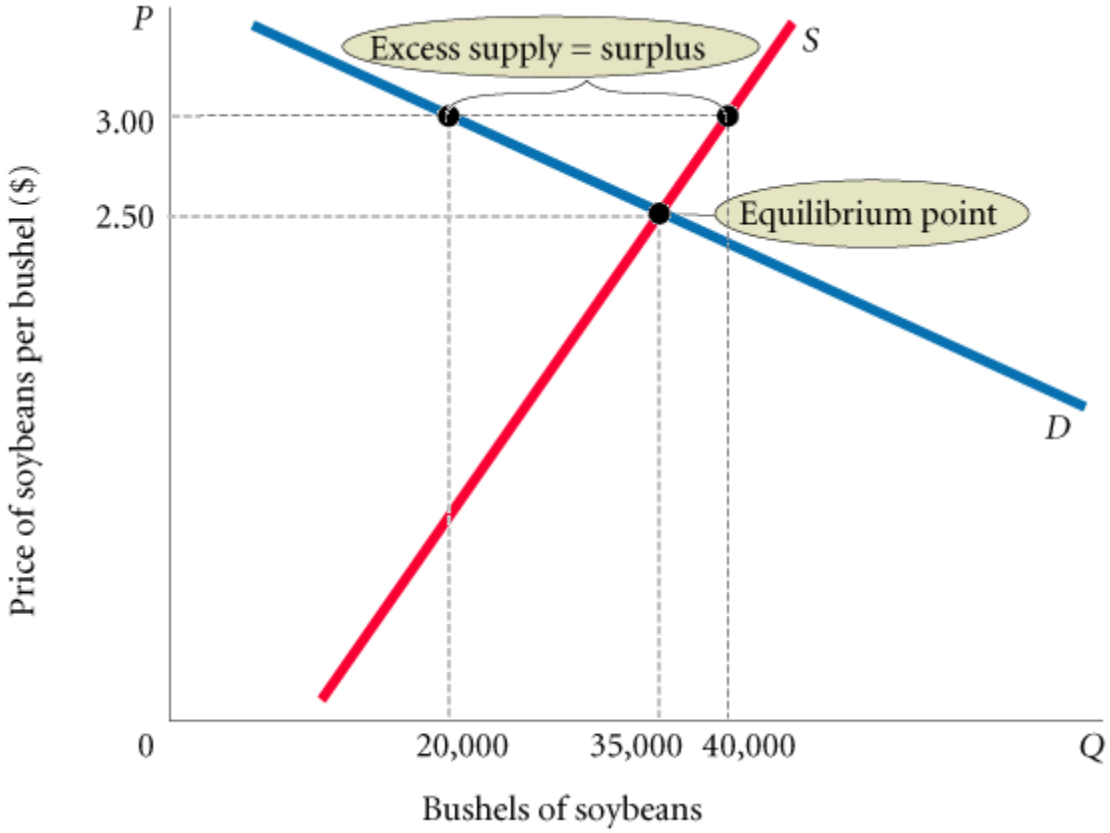
The condition that exists when quantity supplied exceeds quantity demanded at the current price.

FIGURE 9 Excess Demand, or Shortage



When quantity demanded exceeds quantity supplied, price tends to rise. When the price in a market rises, quantity demanded falls and quantity supplied rises until an equilibrium is reached at which quantity demanded and quantity supplied are equal.

FIGURE 10 Excess Supply, or Surplus



When quantity supplied exceeds quantity demanded at the current price, the price tends to fall.
When price falls, quantity supplied is likely to decrease and quantity demanded is likely to increase until an equilibrium price is reached where quantity supplied and quantity demanded are equal.

CHANGES IN EQUILIBRIUM

When supply and demand curves shift, the equilibrium price and quantity change.

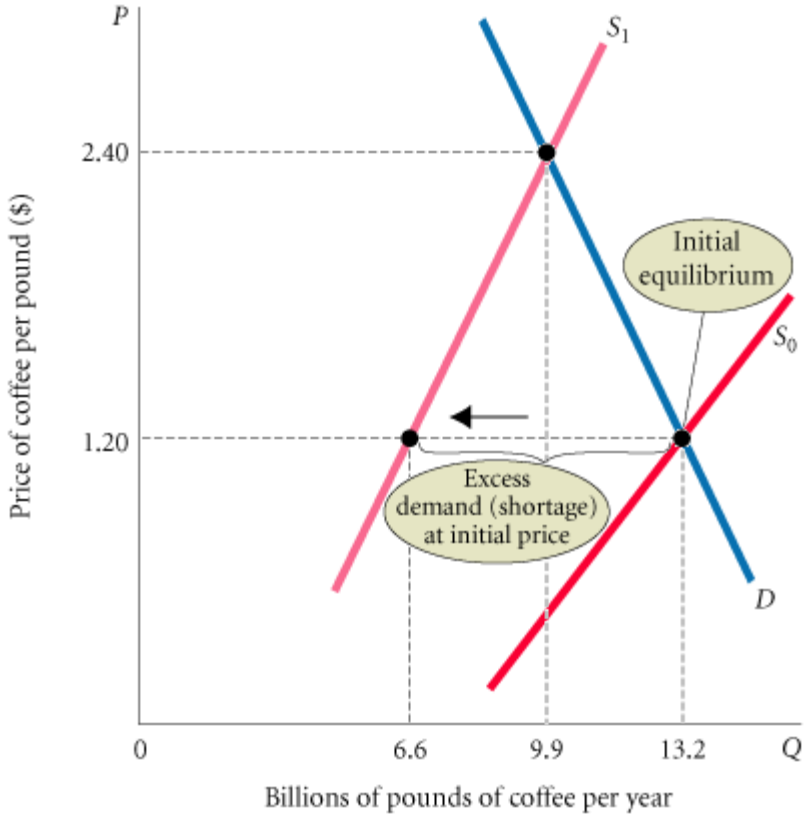


FIGURE 11 **The Coffee Market: A Shift of Supply and Subsequent Price Adjustment**

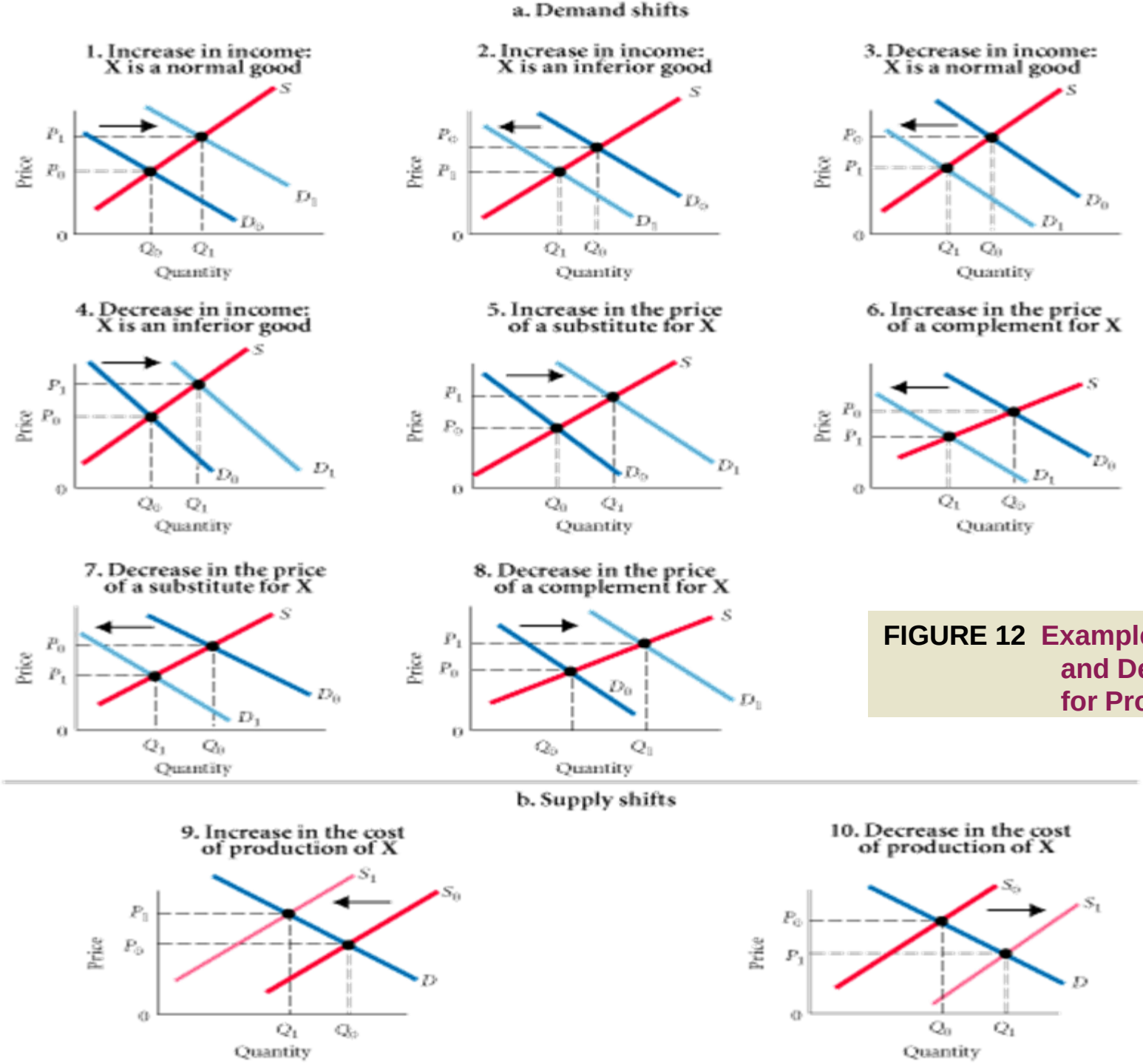


FIGURE 12 **Examples of Supply and Demand Shifts for Product X**

DEMAND AND SUPPLY IN PRODUCT MARKETS: A REVIEW

Here are some important points to remember about the mechanics of supply and demand in product markets:

1. **A demand curve shows how much of a product a household would buy if it could buy all it wanted at the given price. A supply curve shows how much of a product a firm would supply if it could sell all it wanted at the given price.**

2. **Quantity demanded and quantity supplied are always per time period—that is, per day, per month, or per year.**

3. **The demand for a good is determined by price, household income and wealth, prices of other goods and services, tastes and preferences, and expectations.**

4. **The supply of a good is determined by price, costs of production, and prices of related products. Costs of production are determined by available technologies of production and input prices.**

5. **Be careful to distinguish between movements along supply and demand curves and shifts of these curves. When the price of a good changes, the quantity of that good demanded or supplied changes—that is, a movement occurs along the curve. When any other factor changes, the curve shifts, or changes position.**

6. **Market equilibrium exists only when quantity supplied equals quantity demanded at the current price.**

REVIEW TERMS AND CONCEPTS

- capital market
- complements, complementary goods
- demand curve
- demand schedule
- entrepreneur
- equilibrium
- excess demand or shortage
- excess supply or surplus
- factors of production
- firm
- households
- income
- inferior goods
- input or factor markets
- labor market
- land market
- law of demand
- law of supply
- market demand
- market supply
- movement along a demand curve
- movement along a supply curve
- normal goods
- perfect substitutes
- product or output markets
- profit
- quantity demanded
- quantity supplied
- shift of a demand curve
- shift of a supply curve
- substitutes
- supply curve
- supply schedule
- wealth or net worth