

## STUDY UNIT 4

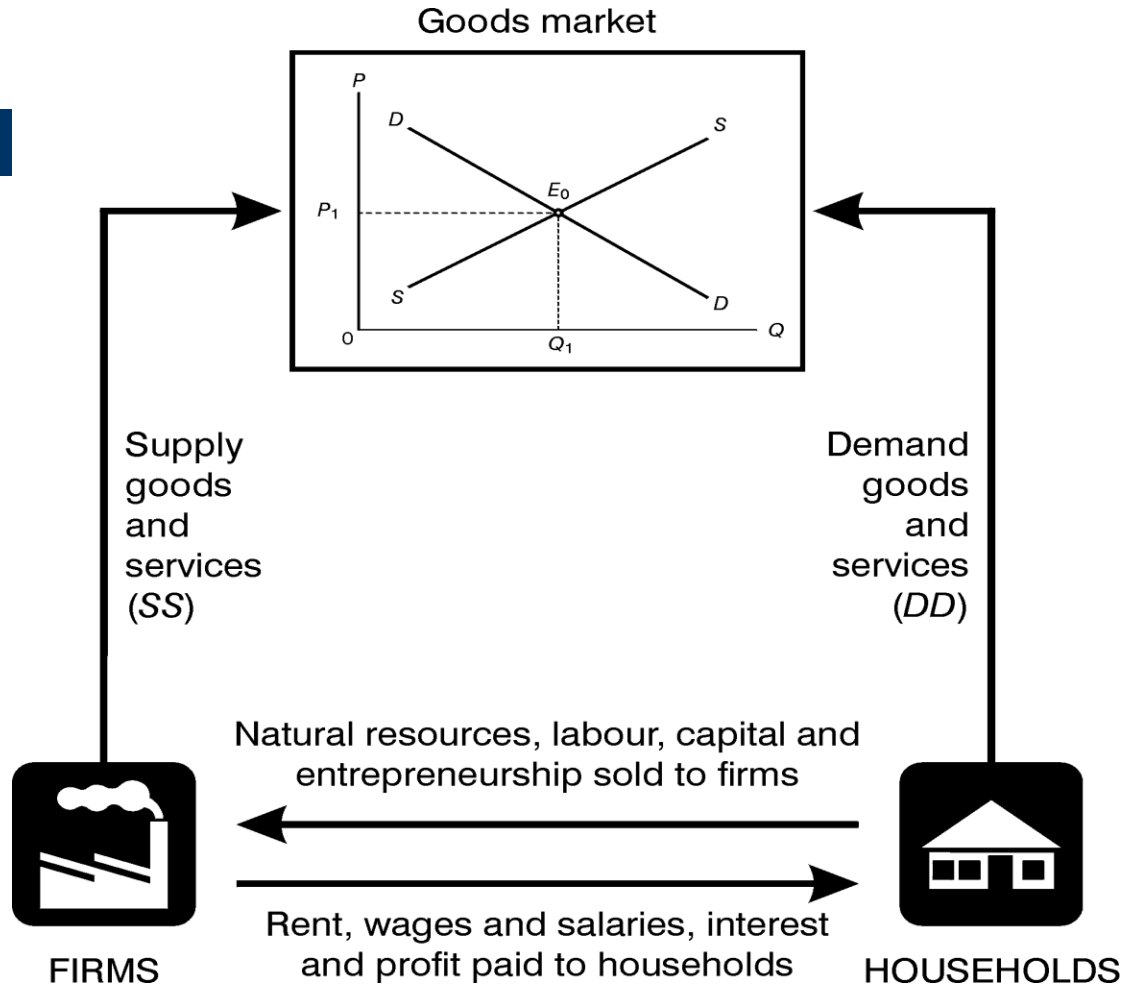
# DEMAND AND SUPPLY



# SOME STUDY OBJECTIVES

- Draw and read simple graphs
- Explain the difference between demand and quantity demanded
- Differentiate between a movement along and a shift of a demand curve
- Identify the determinants of demand
- Differentiate between a movement along and a shift of a supply curve
- Identify the determinants of supply
- Explain how the equilibrium price and equilibrium quantity are determined

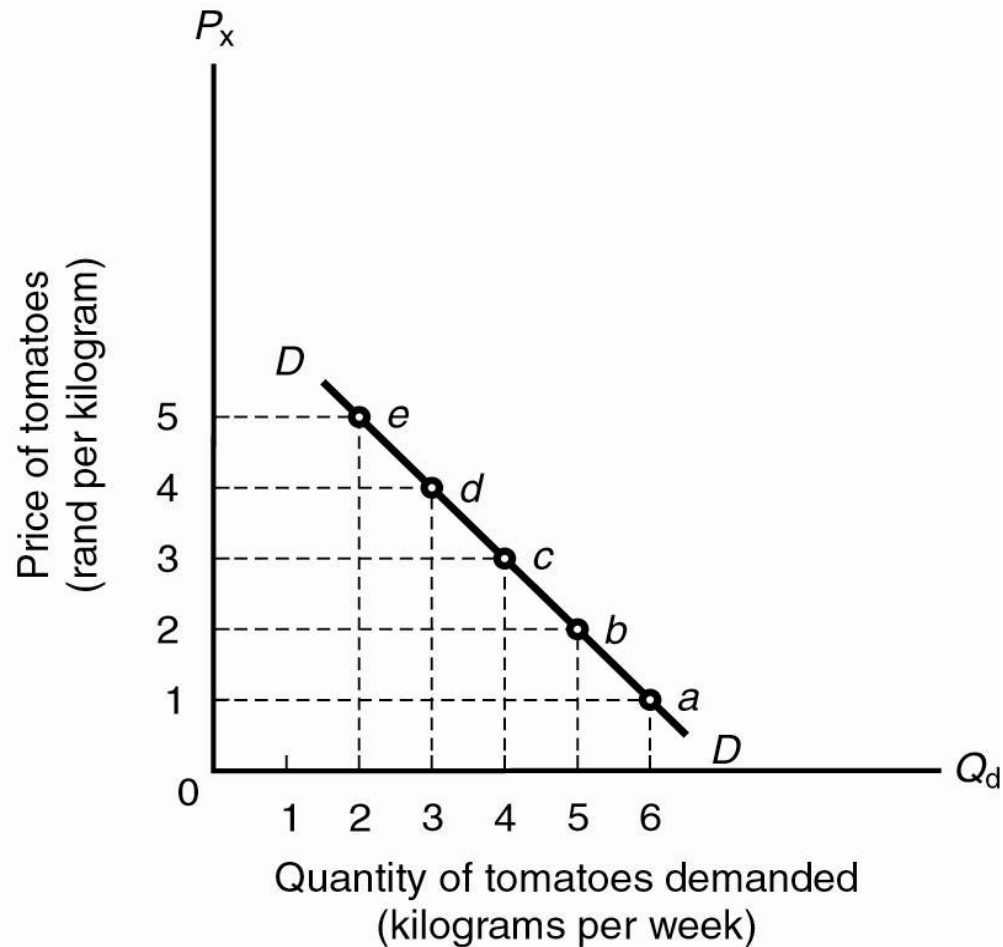
# Figure 7-1 The interaction between households and firms



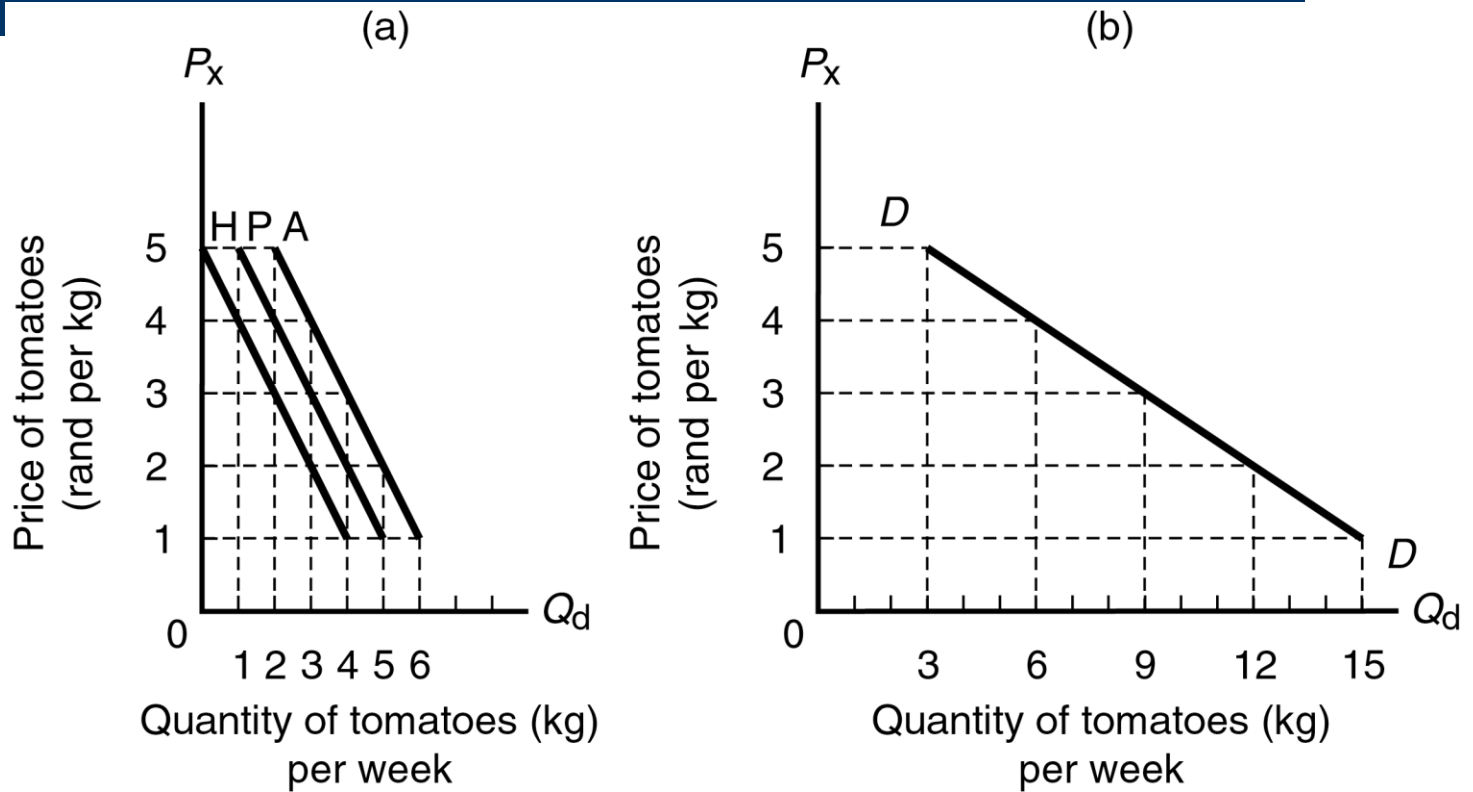
# DEMAND - CONSUMERS

- DEMAND = QUANTITIES OF A GOOD OR SERVICE THAT THE POTENTIAL BUYERS ARE **WILLING** AND **ABLE** TO BUY
- DEMAND IS NOT NEEDS, WANTS, CLAIMS OR REQUESTS
- DEMAND IS A FLOW CONCEPT
- INDIVIDUAL DEMAND vs. MARKET DEMAND
- WHAT DETERMINES INDIVIDUAL DEMAND? Textbook 4<sup>th</sup> ed. pp 111-112
  
- **LAW OF DEMAND**
  - $P \uparrow \rightarrow Q_d \downarrow$
  - $P \downarrow \rightarrow Q_d \uparrow$
- DEMAND SCHEDULE
- GRAPHIC ILLUSTRATION

## Figure 7-2 Anne Smith's weekly demand for tomatoes



# Figure 7-3 The market demand curve

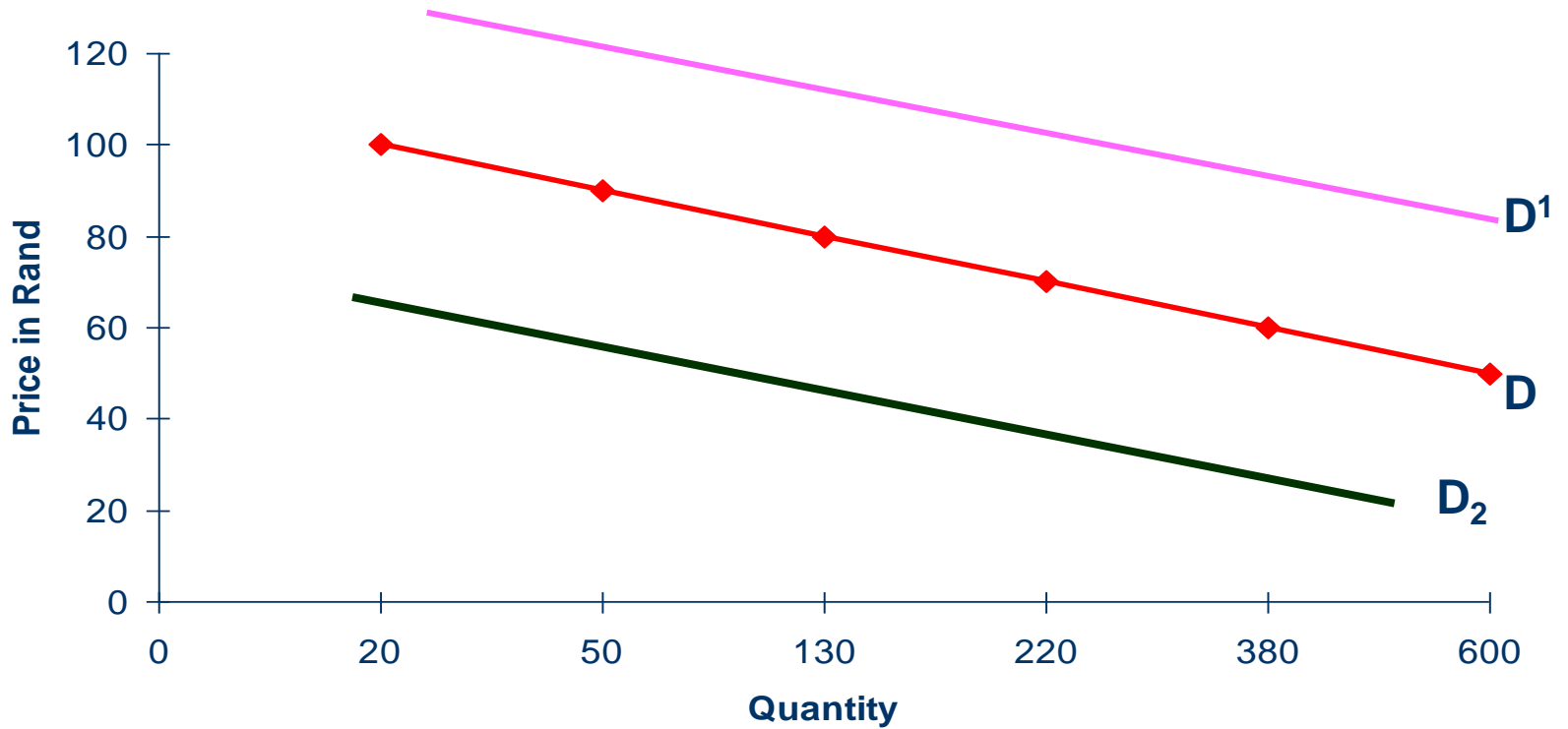


## **BUT LET'S DO OUR OWN EXAMPLE:**

### **DEMAND SCHEDULE**

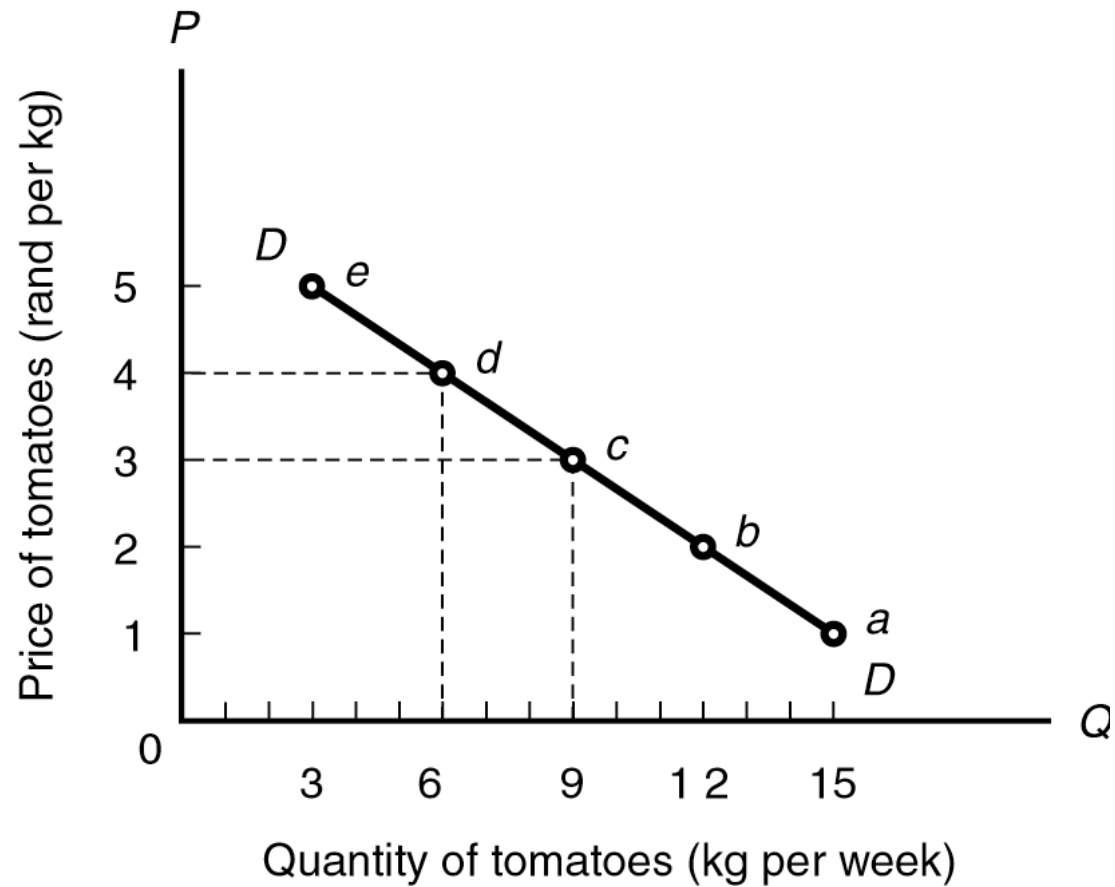
| <b>PRICE/PAIR OF CHILDREN SHOES</b> | <b>QUANTITY DEMANDED</b> | <b>NEW QUANTITY DEMANDED</b> |
|-------------------------------------|--------------------------|------------------------------|
| <b>R50</b>                          | <b>600</b>               | <b>800</b>                   |
| <b>R60</b>                          | <b>380</b>               | <b>580</b>                   |
| <b>R70</b>                          | <b>220</b>               | <b>420</b>                   |
| <b>R80</b>                          | <b>130</b>               | <b>330</b>                   |
| <b>R90</b>                          | <b>50</b>                | <b>250</b>                   |
| <b>R100</b>                         | <b>20</b>                | <b>220</b>                   |

# DEMAND CURVE





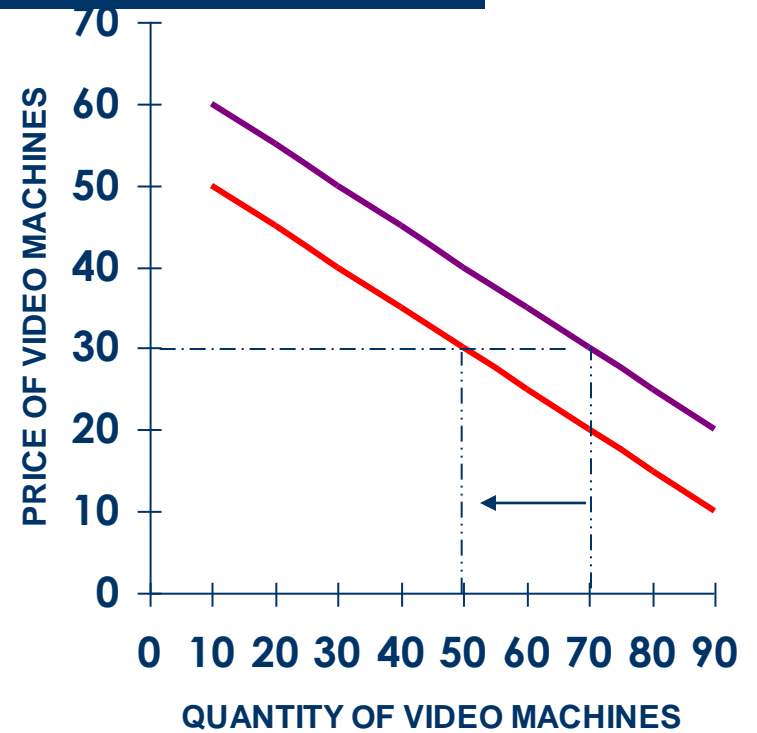
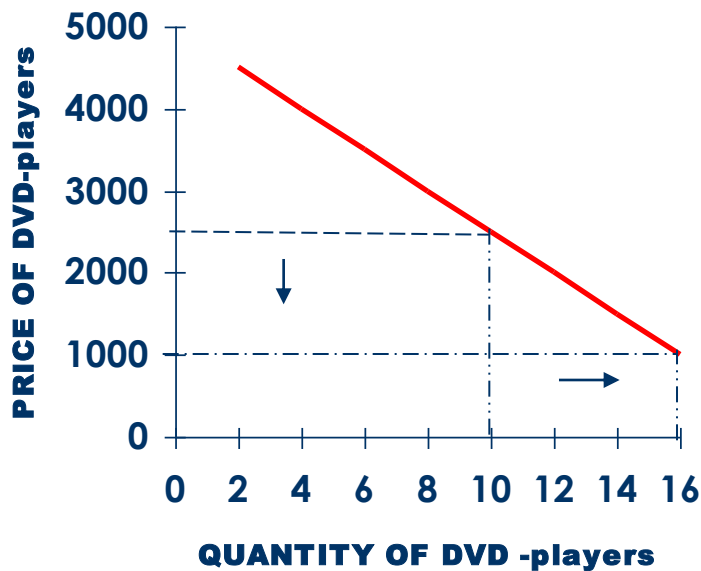
# Figure 7-4 A movement along a demand curve



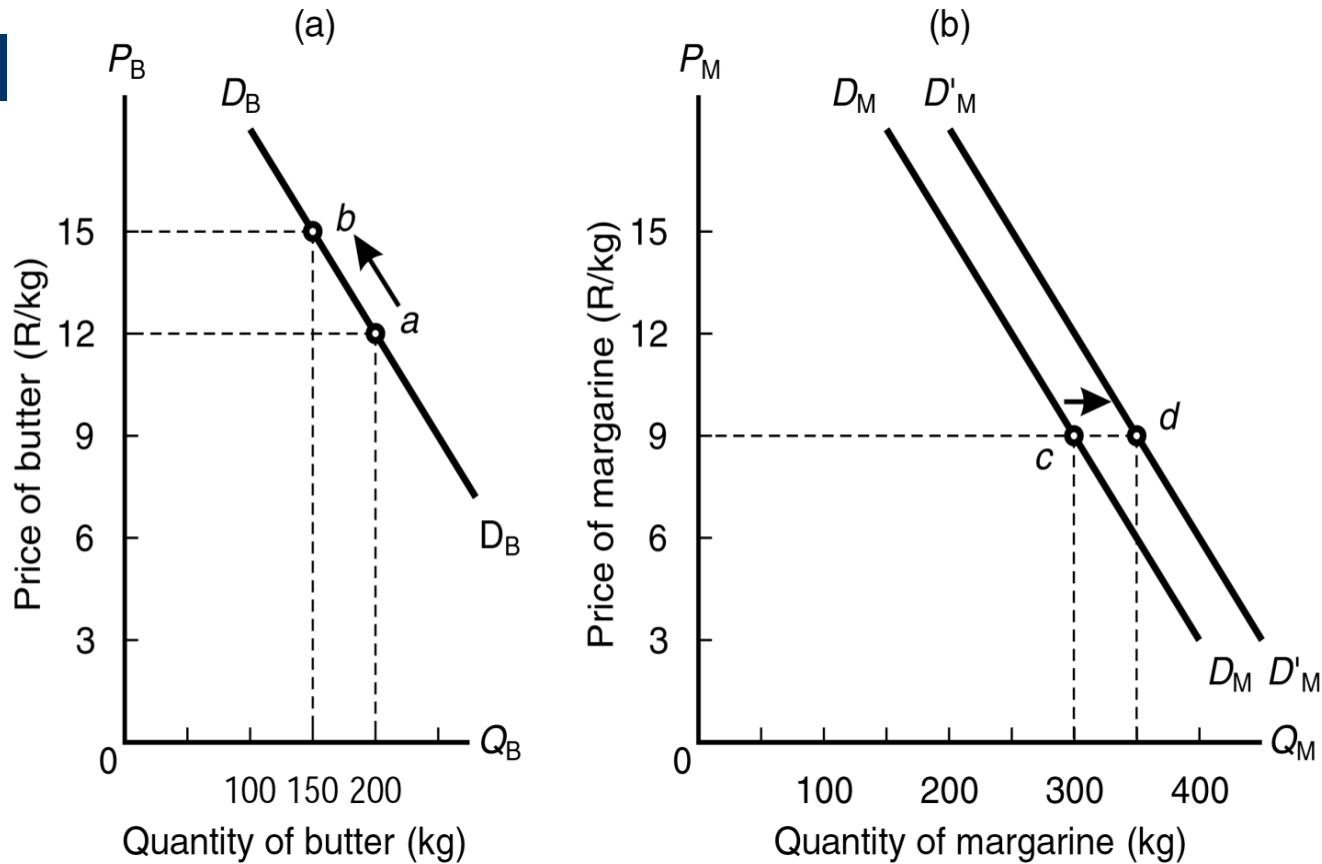
# DEMAND - CONSUMERS

- **DETERMINANTS OF MARKET DEMAND:**
  - Consumer's income
  - Prices of complements and substitutes **in consumption**
  - Consumer Preferences
  - Population/number of buyers/size of the households
  - Consumer expectations of future prices
  - Advertisement campaign

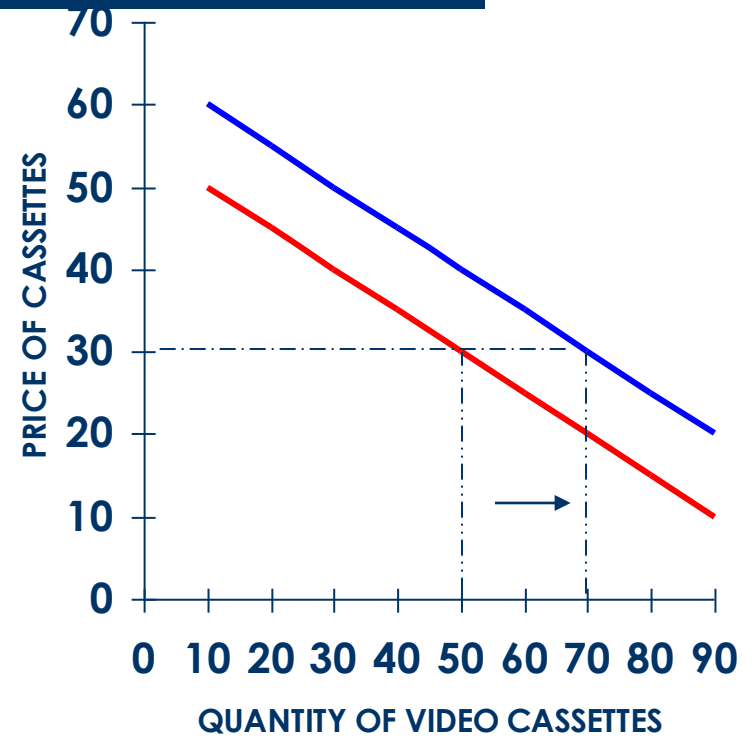
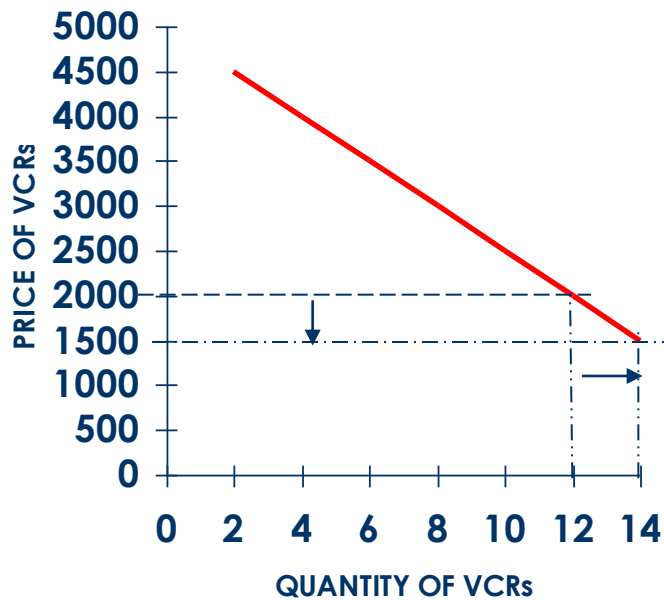
# Substitutes in consumption



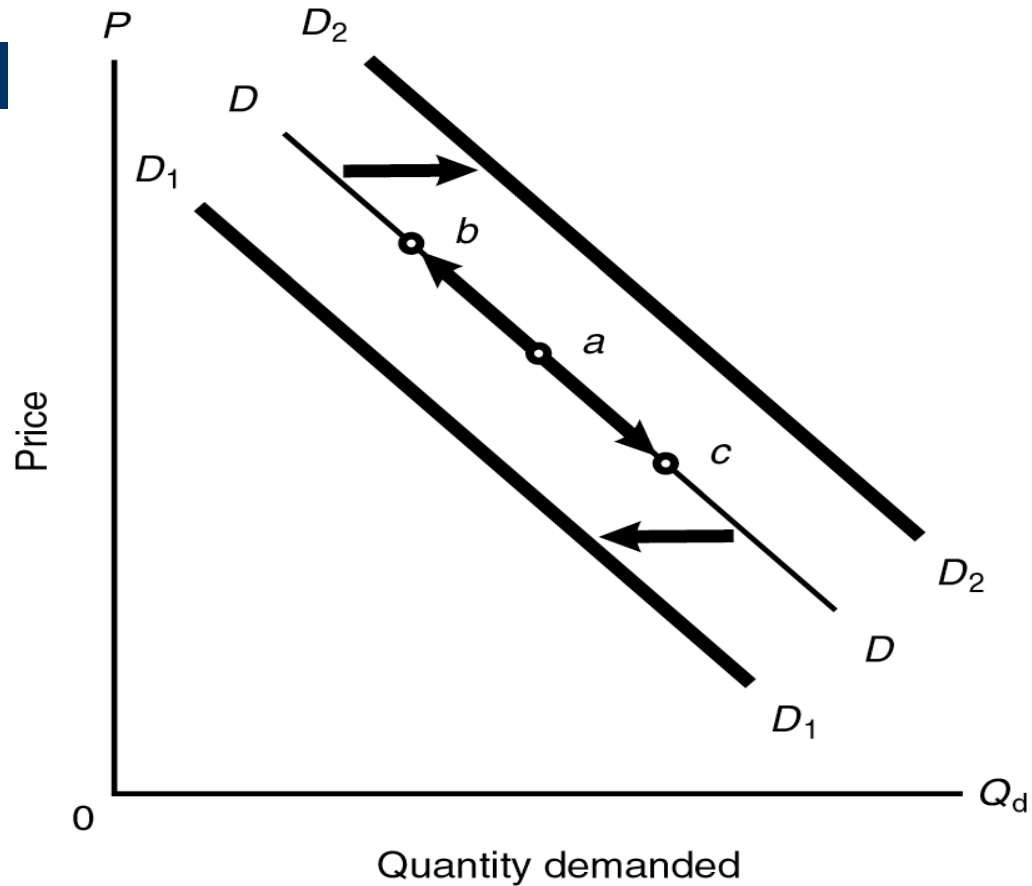
# Figure 7-5 Two substitutes: butter and margarine



# Complements in consumption



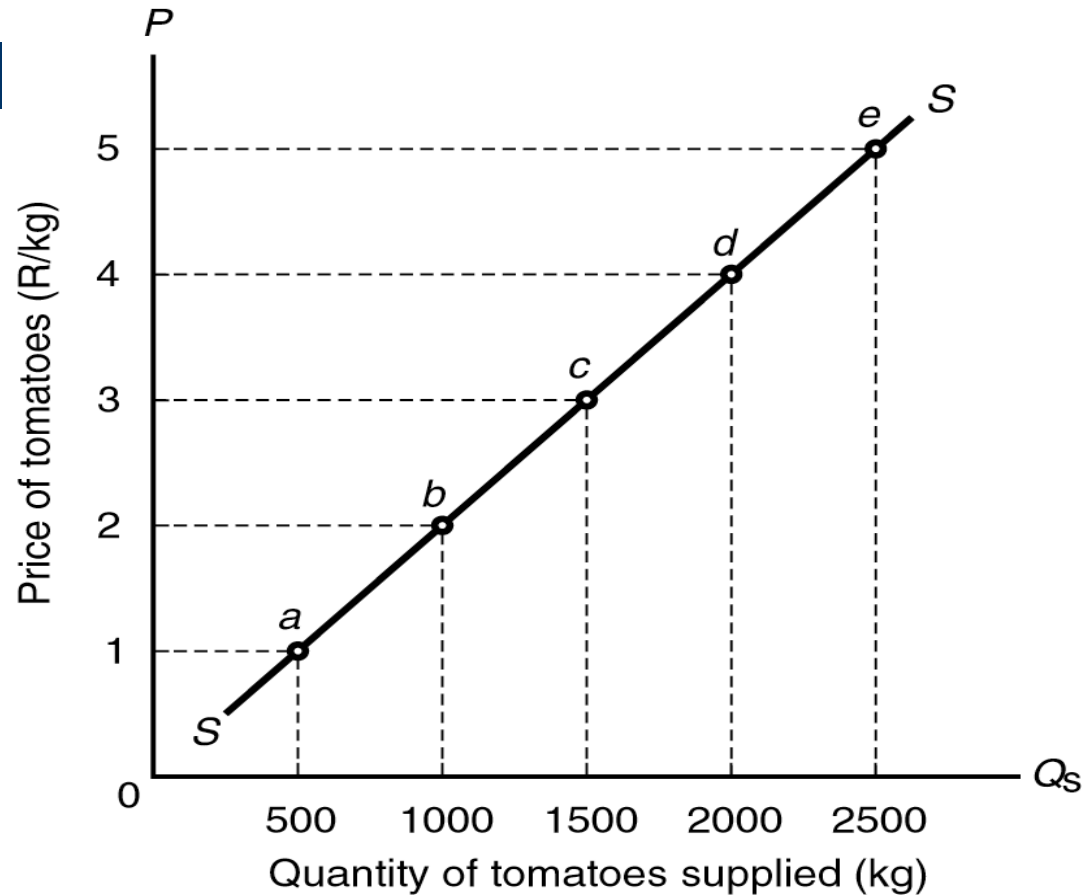
## Figure 7-7 A change in the quantity demanded versus a change in demand



# SUPPLY - PRODUCERS

- **DEFINITION OF SUPPLY: THE QUANTITIES OF A GOOD OR SERVICE THAT PRODUCERS PLAN (AND ARE ABLE) TO SELL AT EACH POSSIBLE PRICE DURING A CERTAIN PERIOD**
- **SUPPLY ALSO A FLOW CONCEPT**
- **INDIVIDUAL SUPPLY** – determined by .... – see textbook pp 122-123
- **LAW OF SUPPLY**
  - $P \uparrow \rightarrow Q_s \uparrow$
  - $P \downarrow \rightarrow Q_s \downarrow$
- **SUPPLY SCHEDULE**
- **GRAPHIC ILLUSTRATION**

# Figure 7-8 Johnny's annual supply of tomatoes

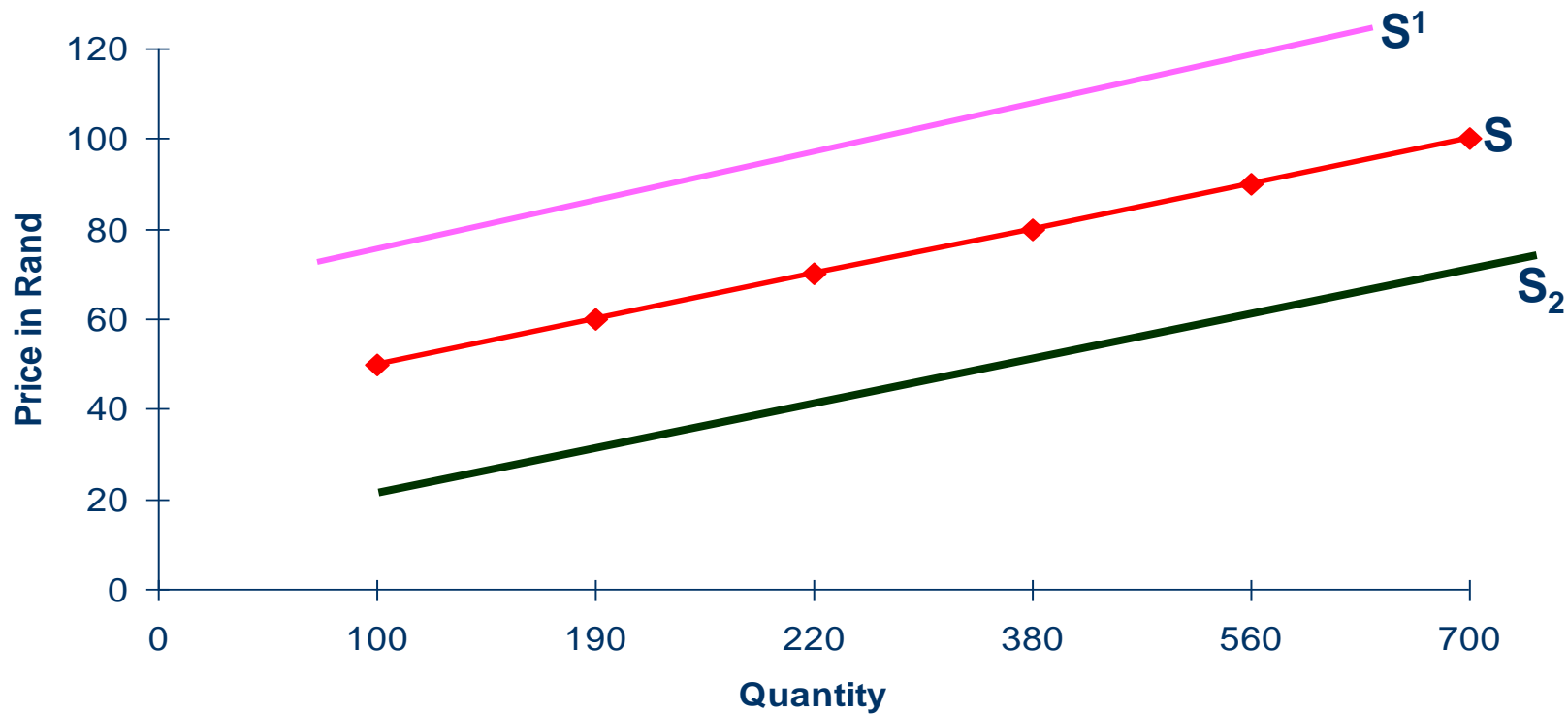




## SUPPLY SCHEDULE

| <b>PRICE/PAIR OF CHILDREN SHOES</b> | <b>QUANTITY SUPPLIED</b> | <b>NEW QUANTITY SUPPLIED</b> |
|-------------------------------------|--------------------------|------------------------------|
| <b>R50</b>                          | <b>100</b>               | <b>300</b>                   |
| <b>R60</b>                          | <b>190</b>               | <b>390</b>                   |
| <b>R70</b>                          | <b>220</b>               | <b>420</b>                   |
| <b>R80</b>                          | <b>380</b>               | <b>580</b>                   |
| <b>R90</b>                          | <b>560</b>               | <b>760</b>                   |
| <b>R100</b>                         | <b>700</b>               | <b>900</b>                   |

# SUPPLY CURVE



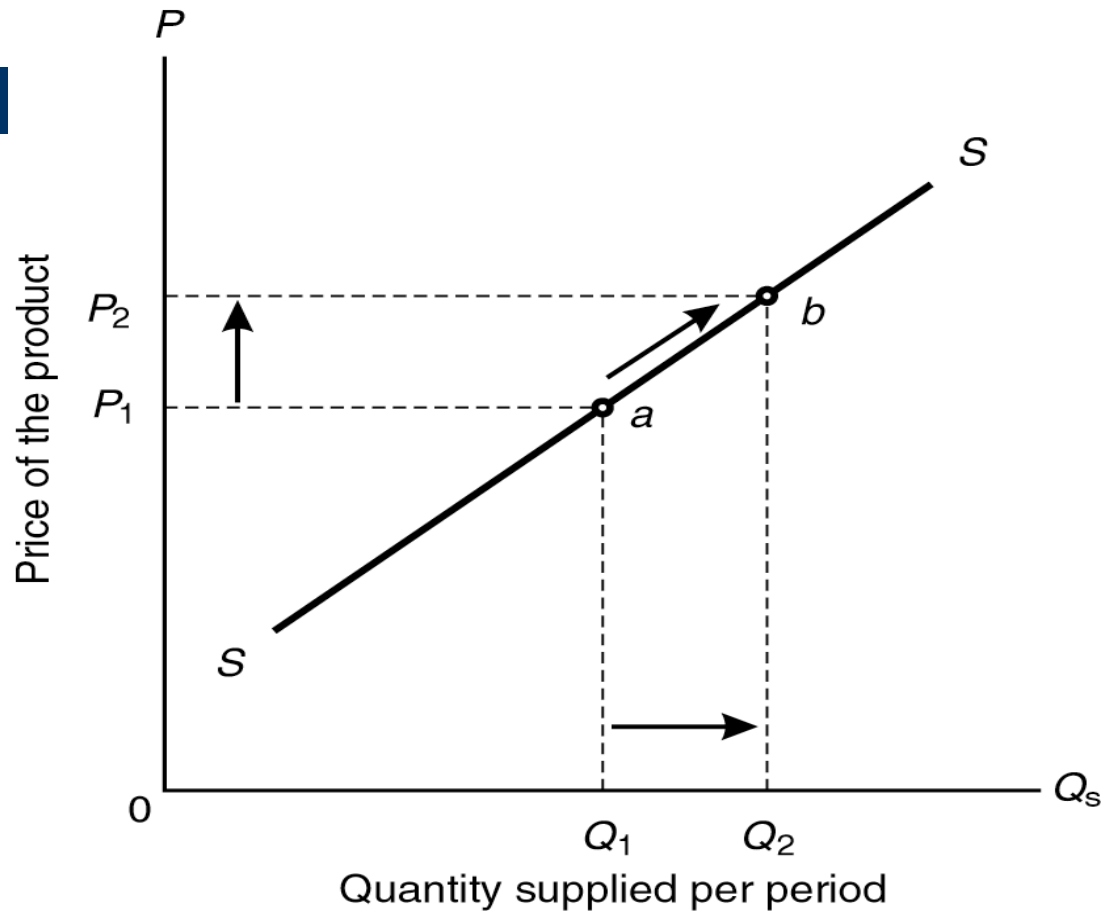
# SUPPLY - PRODUCERS

- **DETERMINANTS OF MARKET SUPPLY:**
  - **Prices of substitutes in production**
  - **Prices of complementary goods in production.**
  - **Price of inputs:**
    - Electricity
    - Rent
    - Interest rates
    - Wages of workers
  - **Expected future price of the product.**
  - **Technology**
  - **Number of firms**

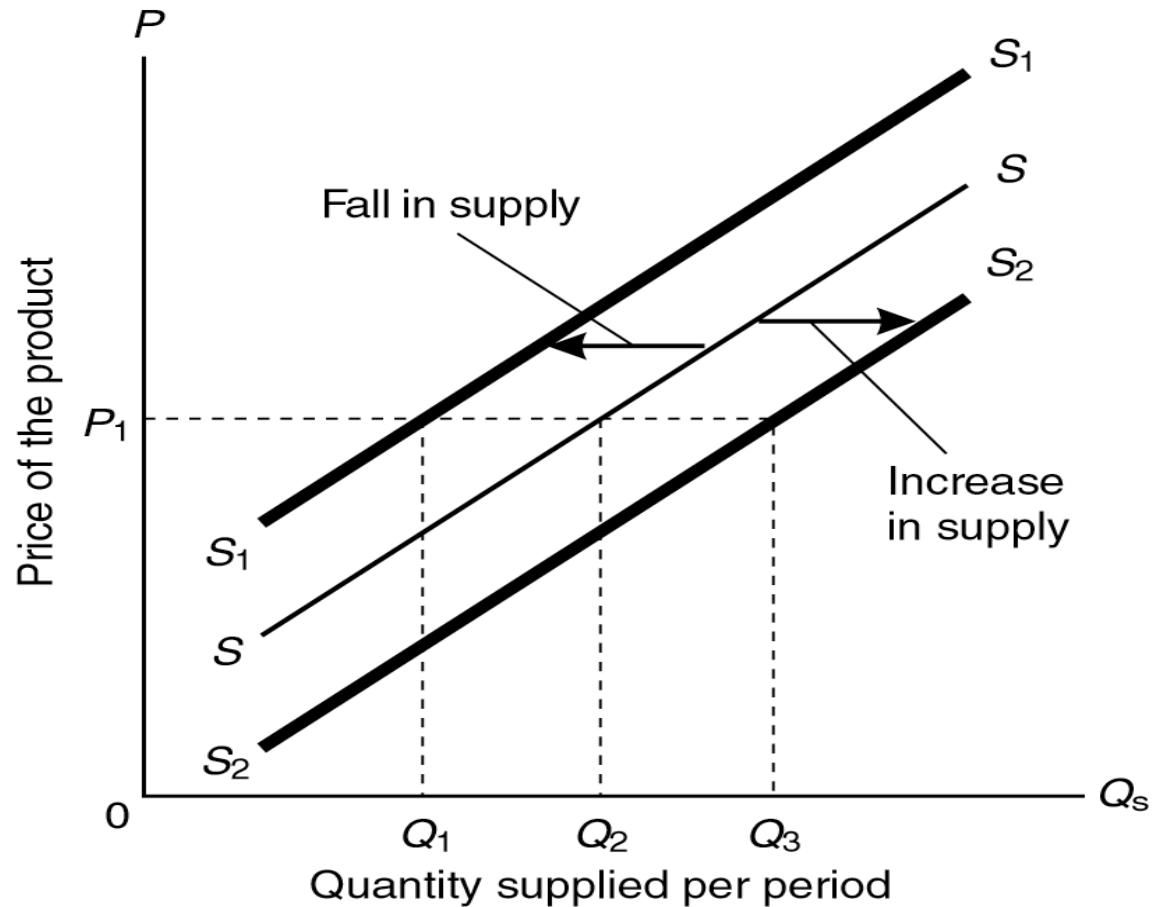
# SUPPLY - PRODUCERS

- **DETERMINANTS OF MARKET SUPPLY:**
  - **Government policy (subsidies & taxes)**
  - **Climate and natural disasters**
  - **Productivity**

## Figure 7-9 A movement along a supply curve: a change in the quantity supplied



## Figure 7-10 Shifts of the supply curve: changes in supply



# THE MARKET SUPPLY CURVE: A SUMMARY

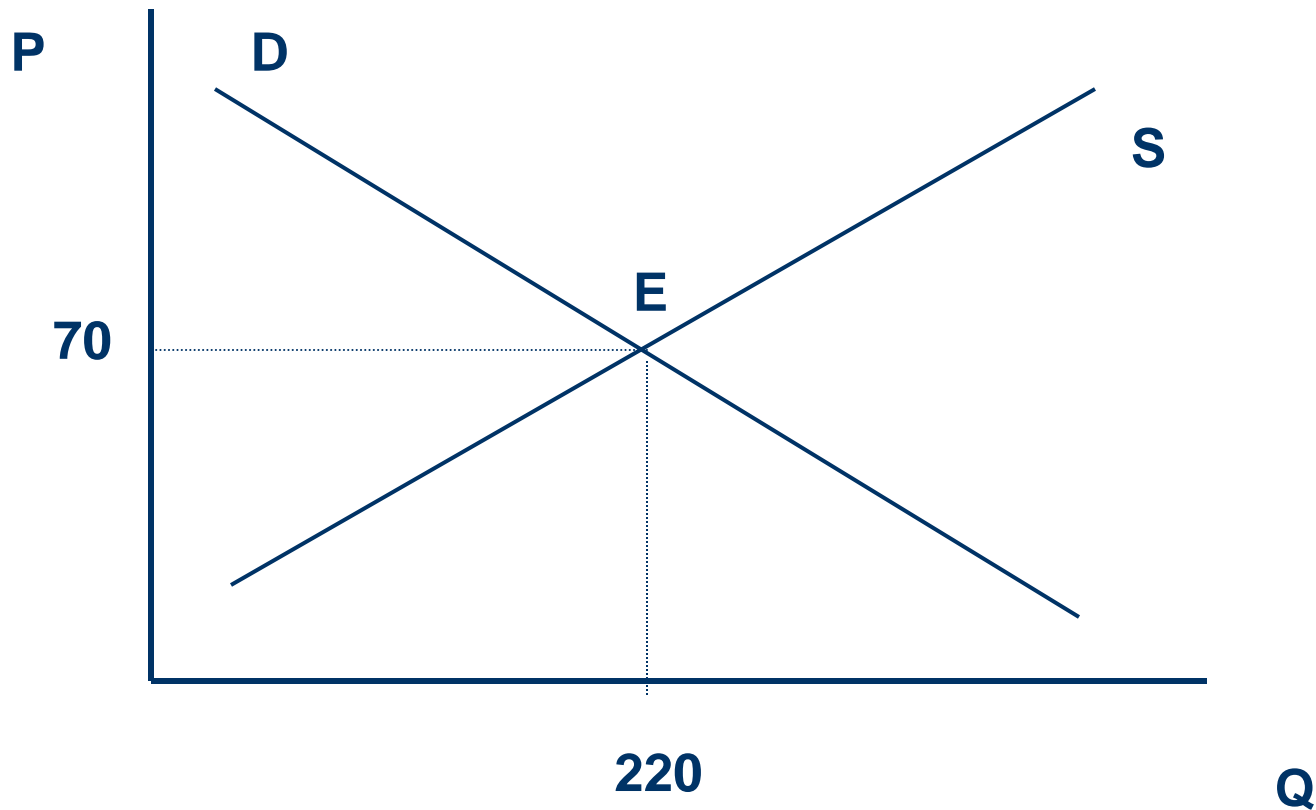
- SEE TABLE 7-5
- BRIEF DISCUSSION IF TIME ALLOWS
- ANY QUESTIONS/DISCUSSION ON DEMAND AND SUPPLY SO FAR?
- AFTER WHICH, WE TURN TO **MARKET EQUILIBRIUM**
- **NOTE THE IMPORTANT FUNCTIONS OF PRICES IN A MARKET ECONOMY – textbook pp 127 - 129**

## DEMAND AND SUPPLY SCHEDULES

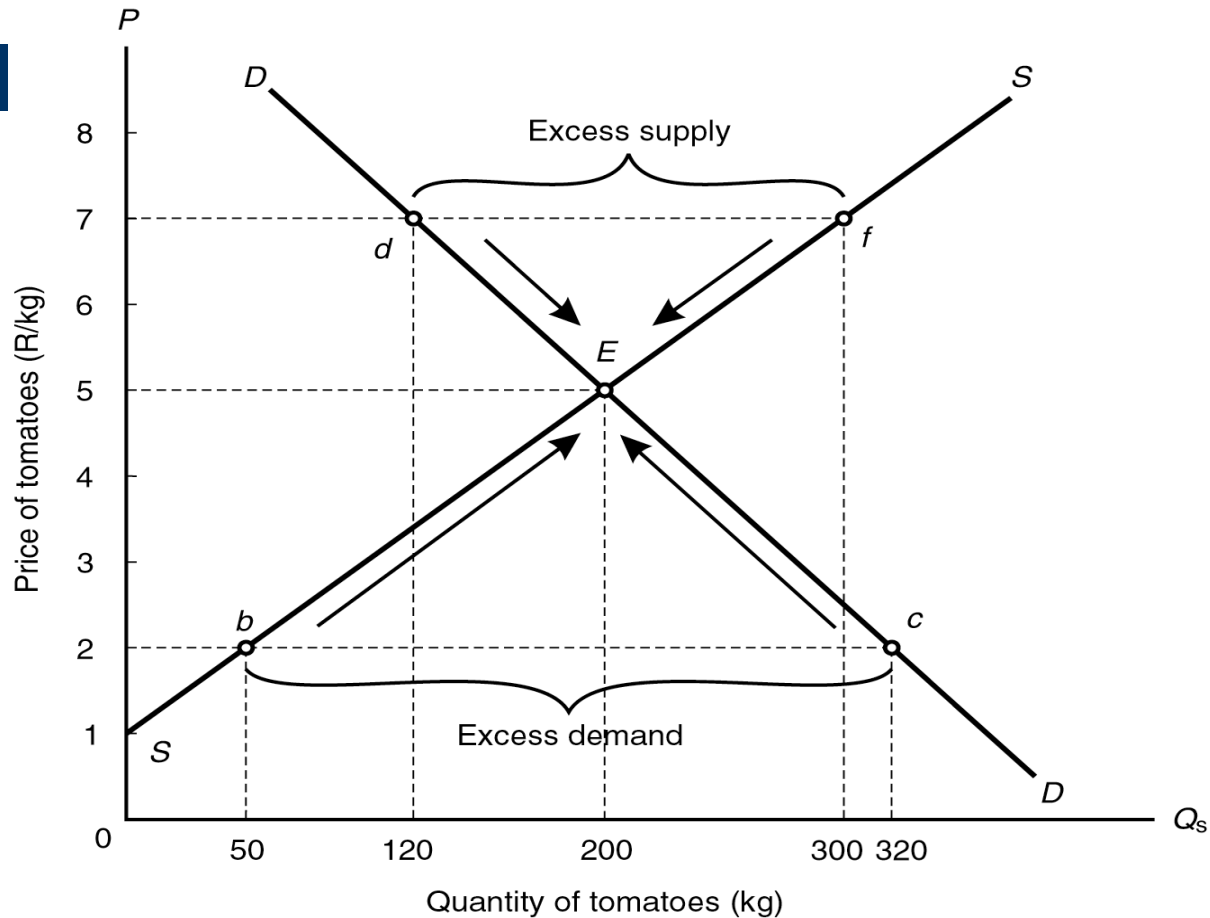
| <b>Price of children shoes</b> | <b>Quantity demanded</b> | <b>Quantity supplied</b> | <b>Excess demand/Excess supply</b> |
|--------------------------------|--------------------------|--------------------------|------------------------------------|
| <b>R50</b>                     | <b>600</b>               | <b>100</b>               | <b>-500</b>                        |
| <b>R60</b>                     | <b>380</b>               | <b>190</b>               | <b>-190</b>                        |
| <b>R70</b>                     | <b>220</b>               | <b>220</b>               | <b>0</b>                           |
| <b>R80</b>                     | <b>130</b>               | <b>380</b>               | <b>250</b>                         |
| <b>R90</b>                     | <b>50</b>                | <b>560</b>               | <b>510</b>                         |



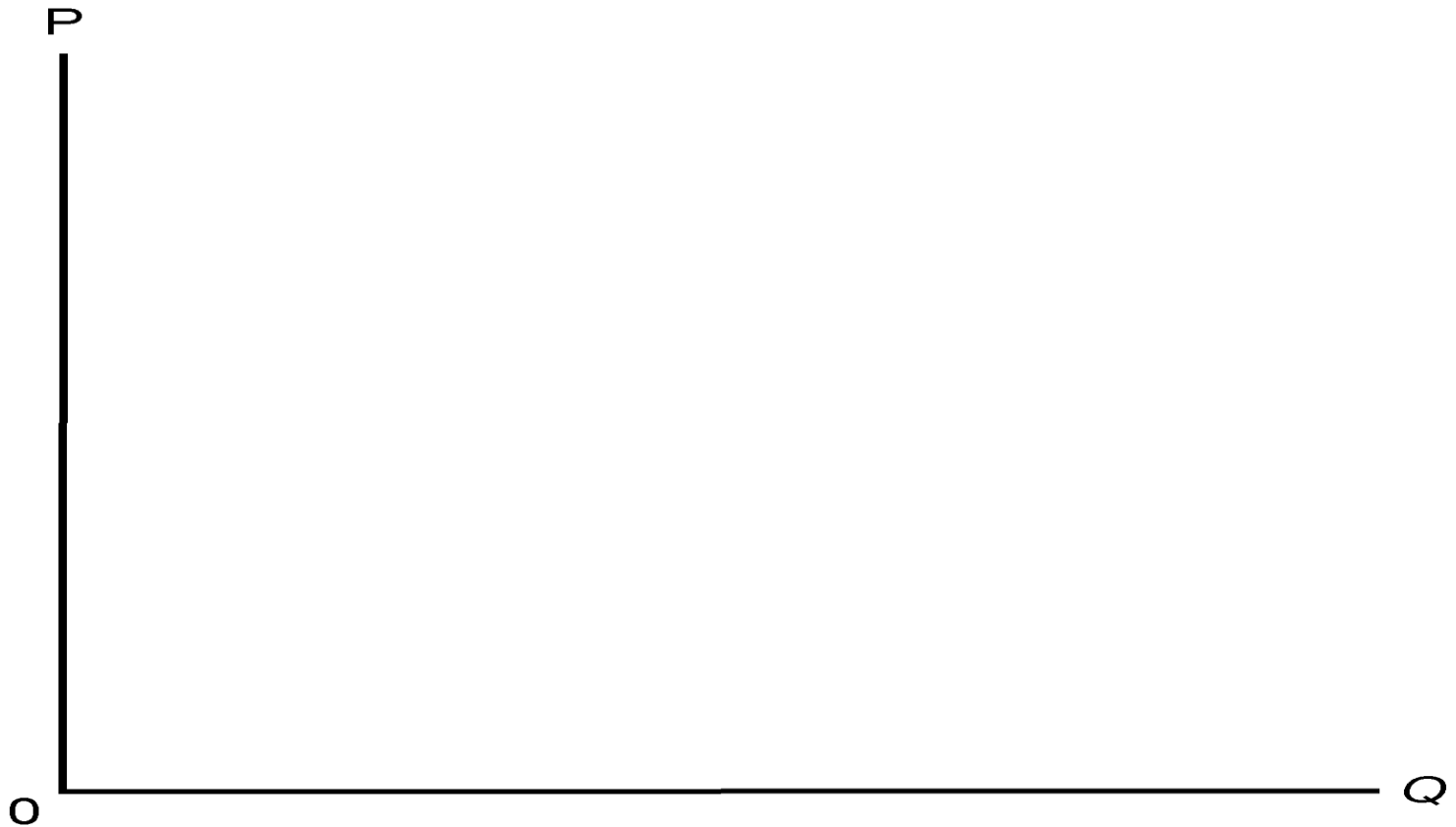
## THE MARKET MECHANISM



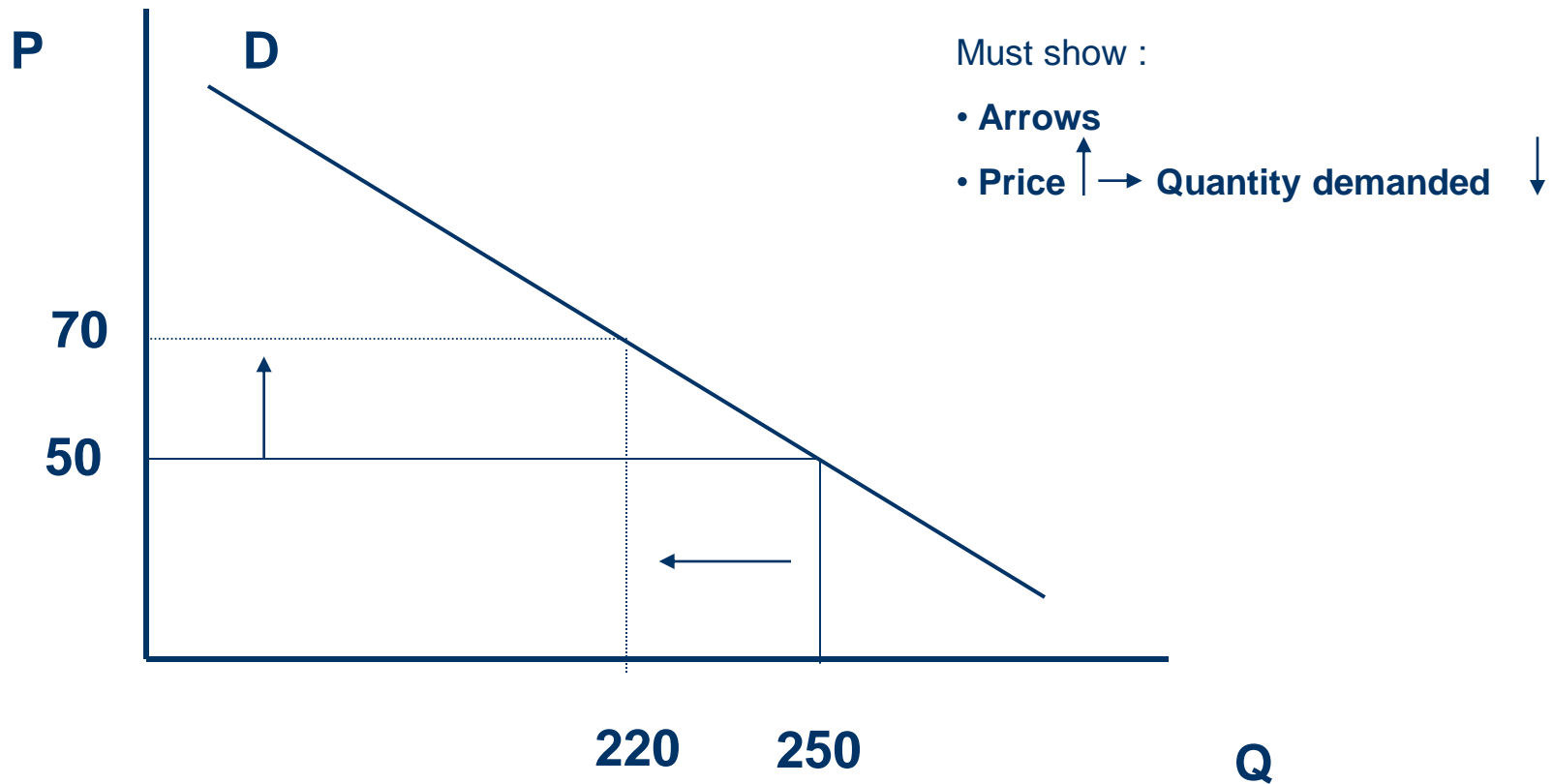
# Figure 7-11 Demand, supply and market equilibrium



# ILLUSTRATE THE LAW OF DEMAND GRAPHICALLY



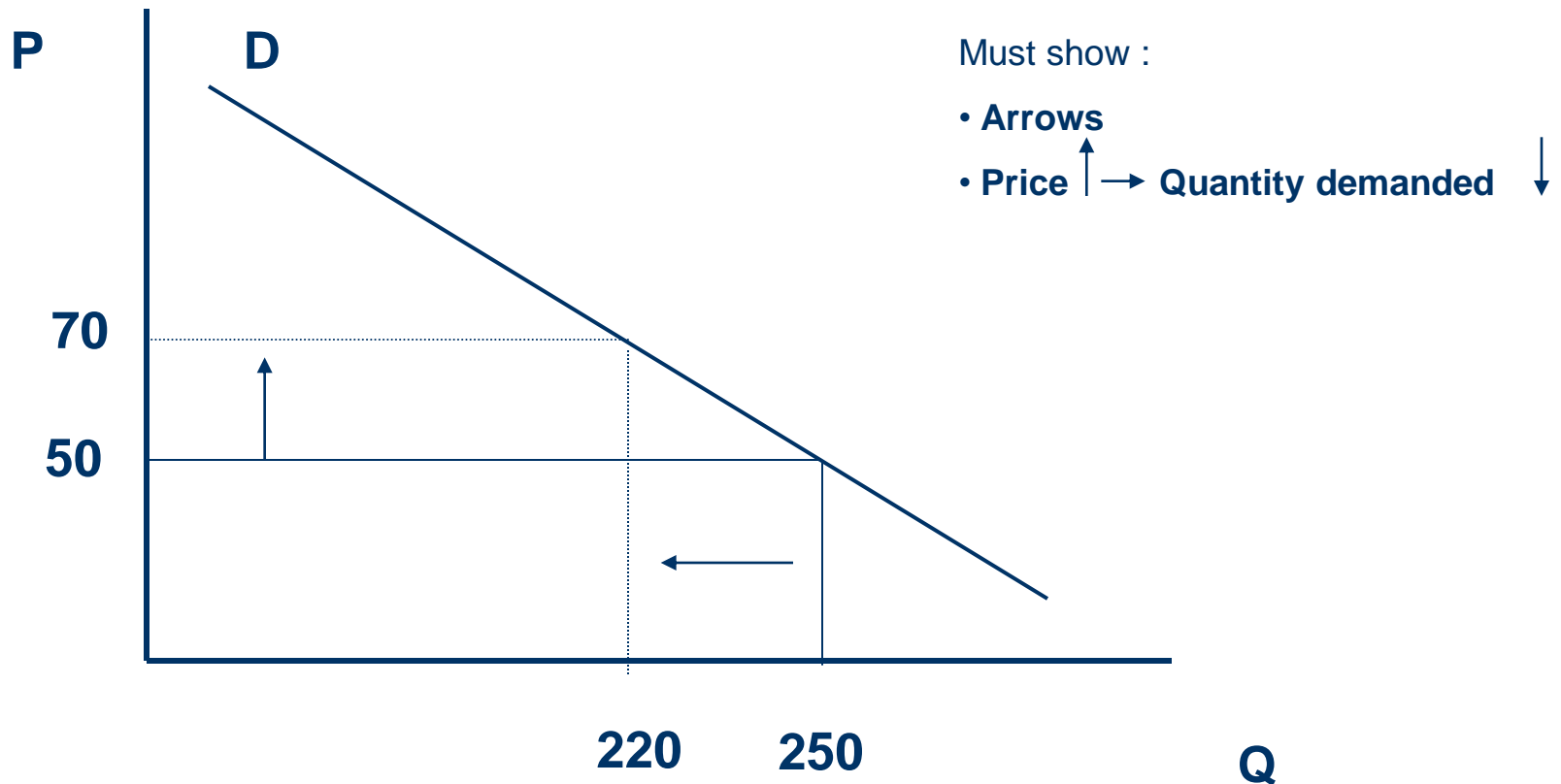
# ILLUSTRATE THE LAW OF DEMAND GRAPHICALLY



# ILLUSTRATE AN INCREASE IN THE PRICE OF BEEF DEMANDED



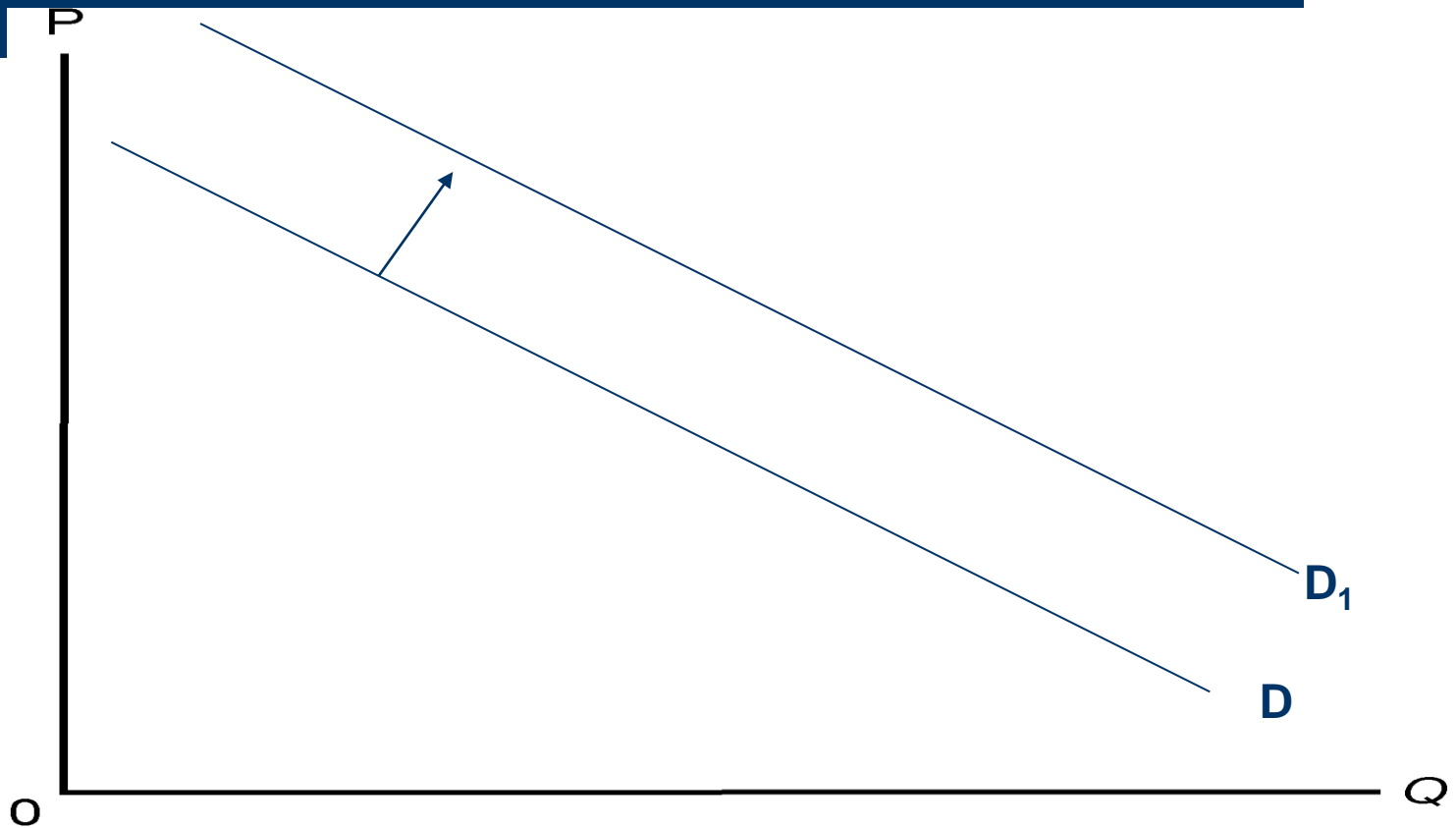
# ILLUSTRATE AN INCREASE IN THE PRICE OF BEEF DEMANDED



ILLUSTRATE WHAT HAPPENS TO DEMAND OR SUPPLY IF THERE IS  
AN **INCREASE IN POPULATION**



ILLUSTRATE WHAT HAPPENS TO DEMAND OR SUPPLY IF THERE IS AN  
INCREASE IN POPULATION

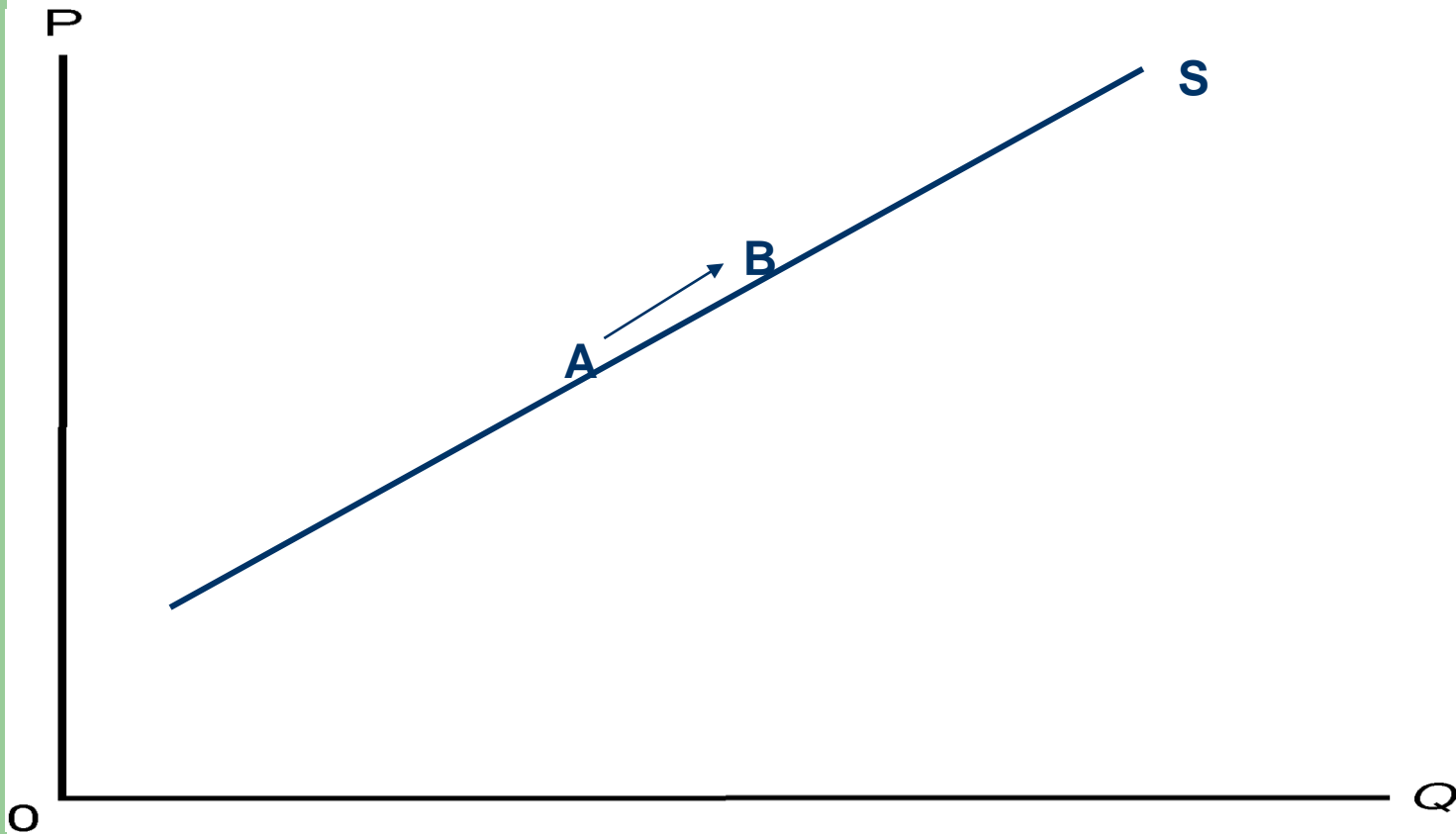




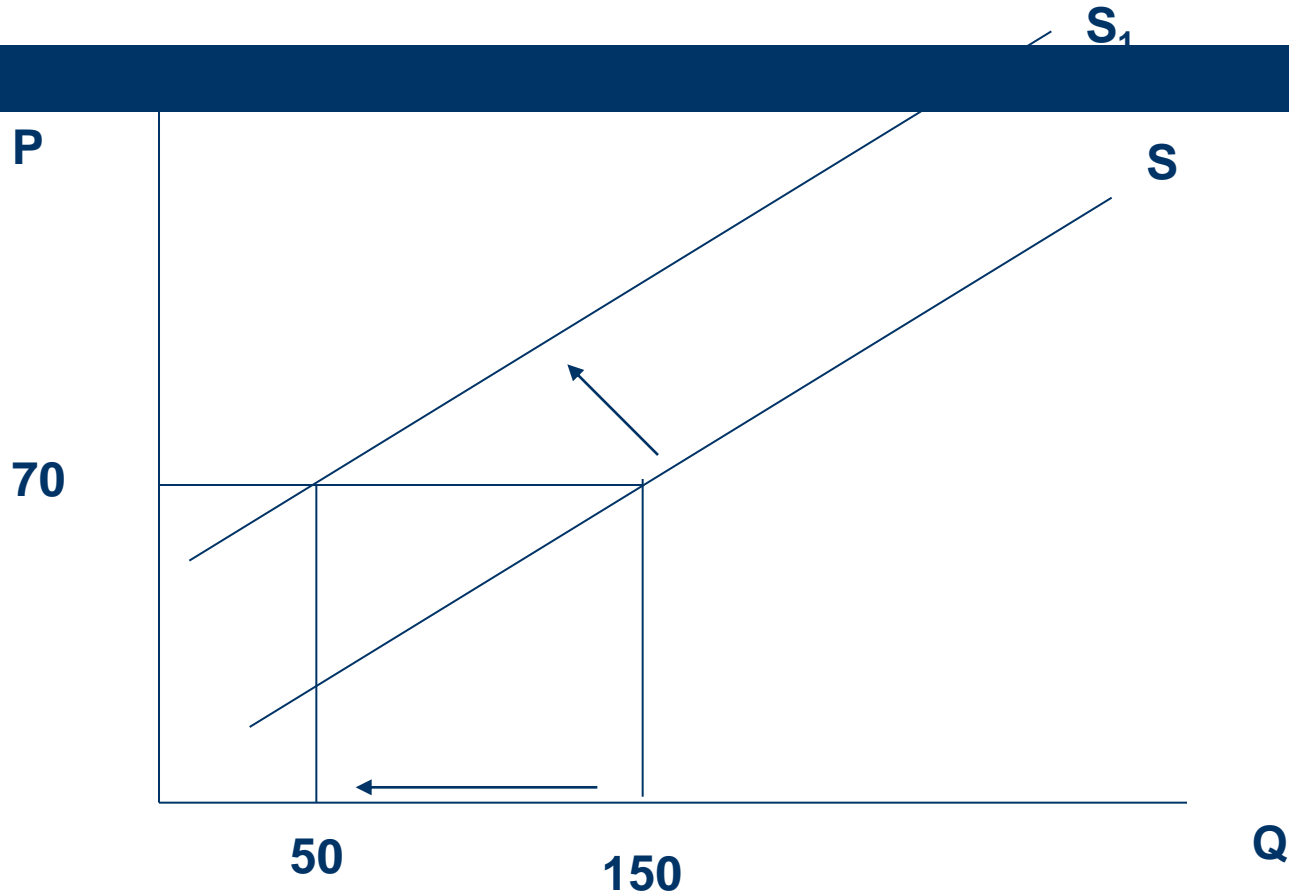
ILLUSTRATE WHAT HAPPENS TO THE SUPPLY CURVE IF THE PRICE OF THE PRODUCT SUPPLIED INCREASES



# ILLUSTRATE WHAT HAPPENS TO THE SUPPLY CURVE IF THE PRICE OF THE PRODUCT SUPPLIED INCREASES



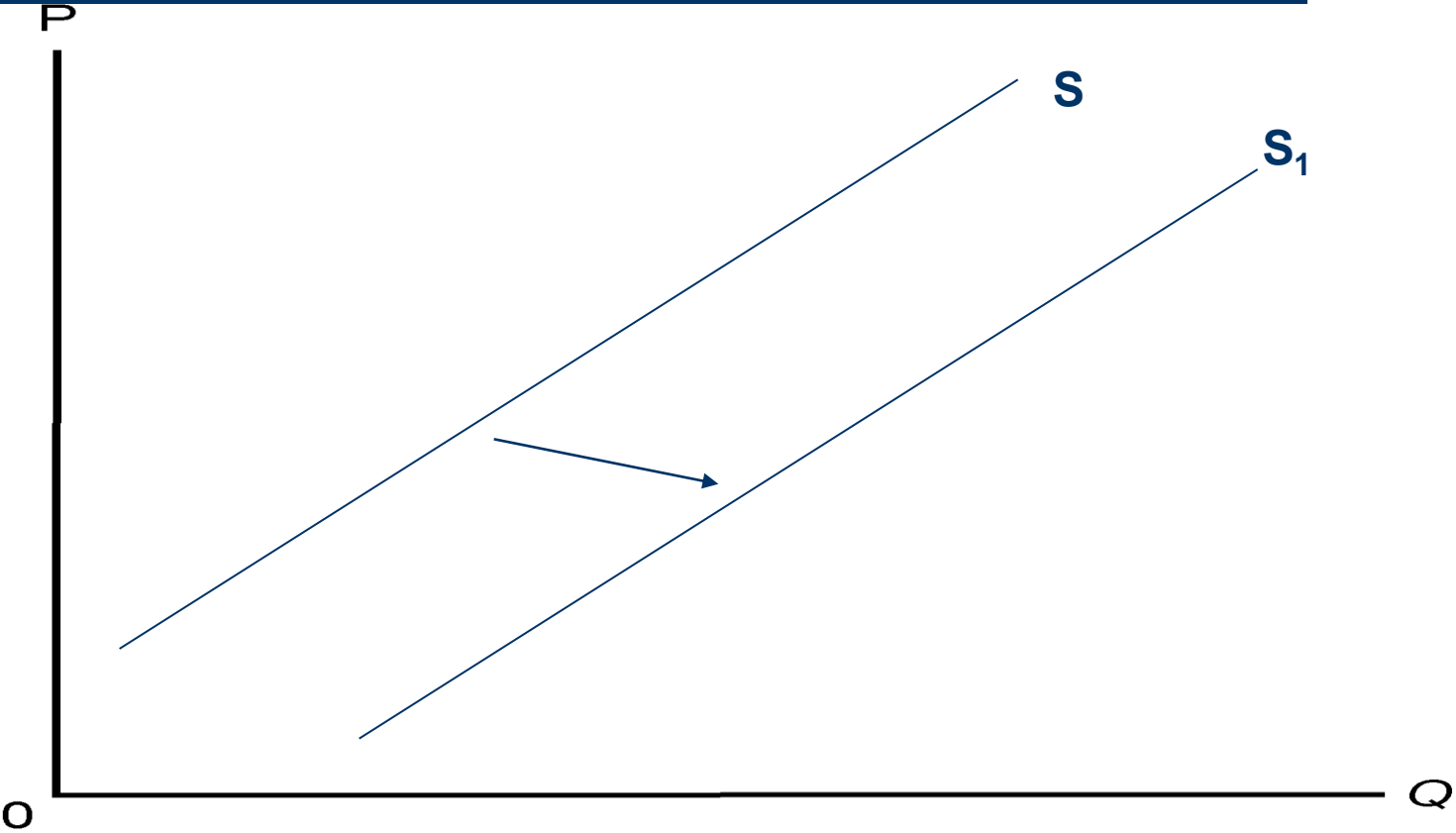
# ILLUSTRATE A DECREASE IN THE SUPPLY OF TOMATOES



ILLUSTRATE WHAT HAPPENS TO THE DEMAND OR SUPPLY CURVES IF THERE IS AN **INCREASE IN THE NUMBER OF FIRMS**



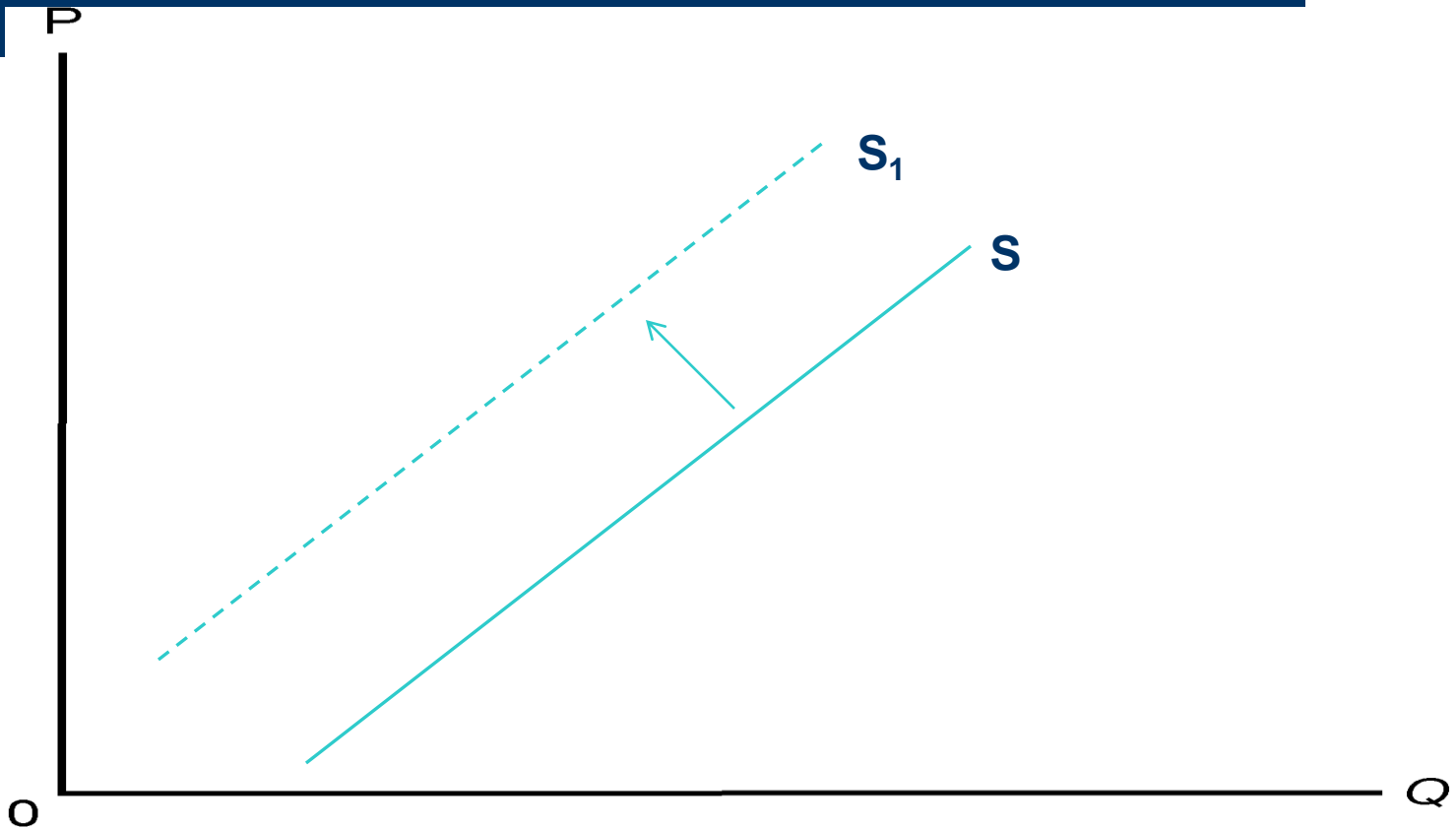
ILLUSTRATE WHAT HAPPENS TO THE DEMAND OR SUPPLY CURVES IF THERE IS AN INCREASE IN THE NUMBER OF FIRMS

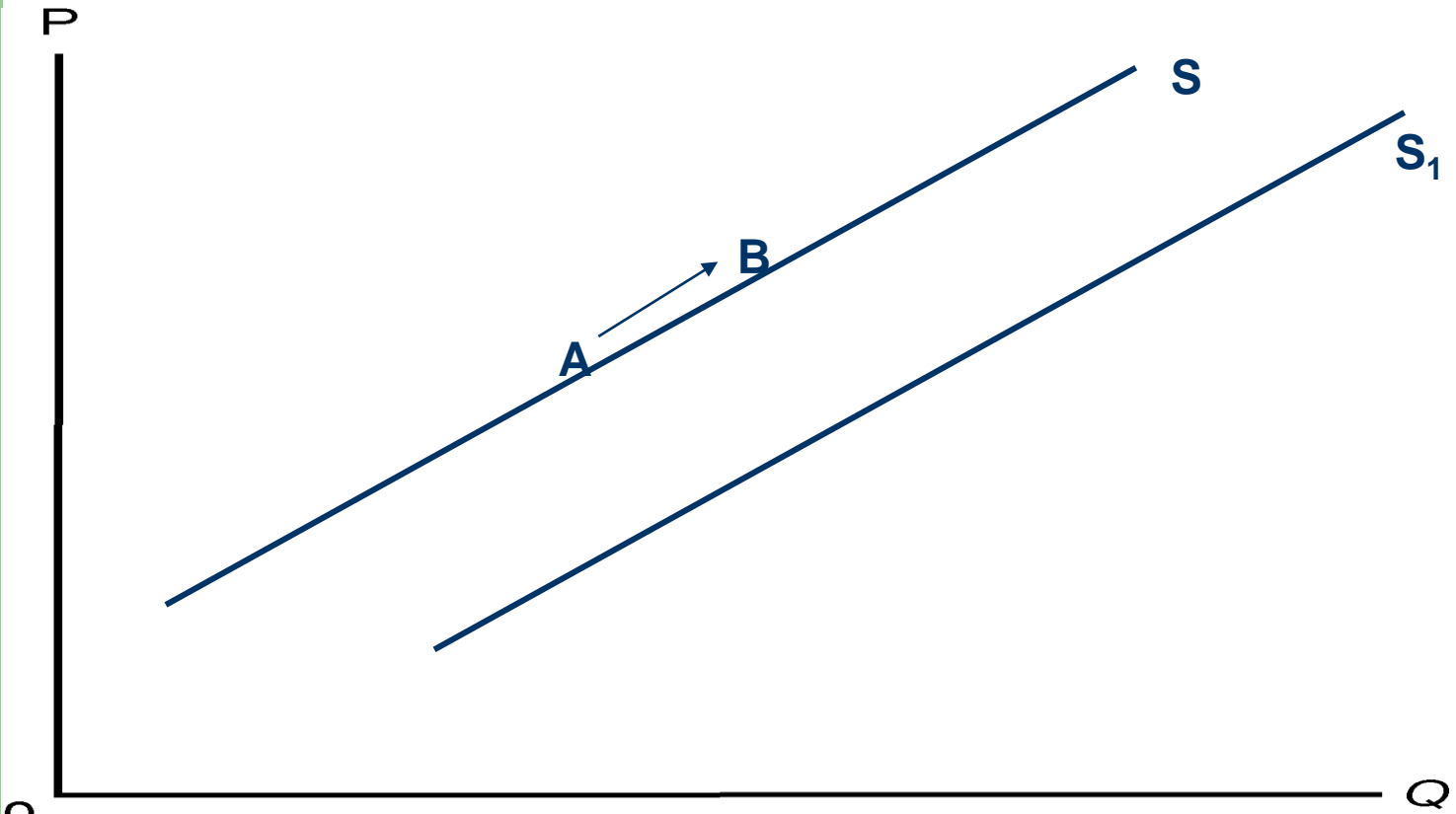


ILLUSTRATE WHAT HAPPENS TO THE SUPPLY CURVE FOR CAULIFLOWER IF THERE IS AN INCREASE IN THE PRICE OF TOMATOES A SUBSTITUTE IN PRODUCTION



ILLUSTRATE WHAT HAPPENS TO THE SUPPLY CURVE FOR CAULIFLOWER IF THERE IS AN INCREASE IN THE PRICE OF TOMATOES A SUBSTITUTE IN PRODUCTION



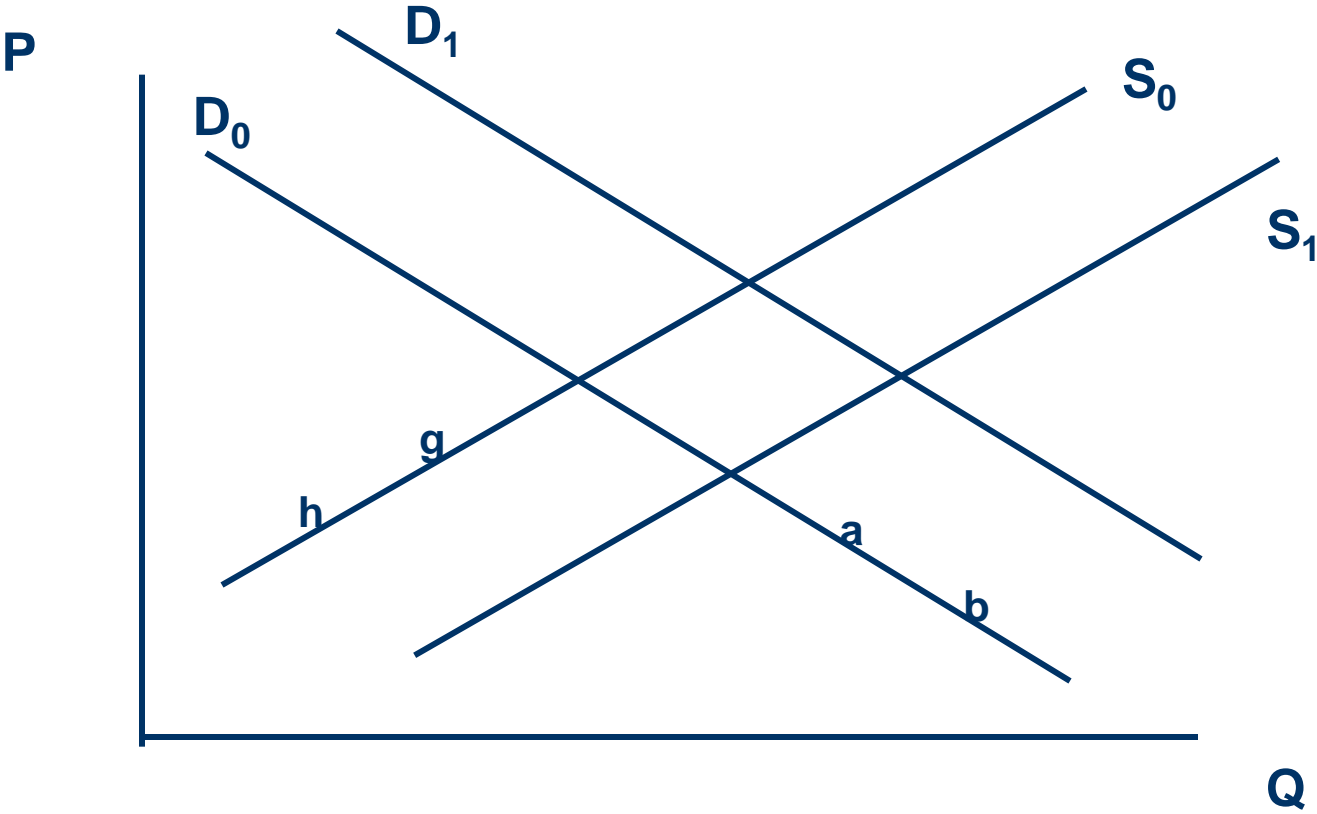




## QUESTIONS TO SLIDE 40

- Name one factor which causes a movement from point A to Point B?
- Name three reasons for a shift in the curve from S to  $S_1$ . Indicate **clearly direction of change** in each case?

# Shifts vs. Movements along for potatoes



## QUESTIONS RELATING TO SLIDE 42

- Which movement or shift in the graph indicates a decrease in supply?
- Which movement or shift in the graph indicates an increase in the cost of labour?
- If the price of potatoes increases in the graph then quantity demanded changes from?
- Suppose the price of rice ( a substitute in consumption for potatoes ) decreases, it will cause a shift or movement along the curve from ..... to .....

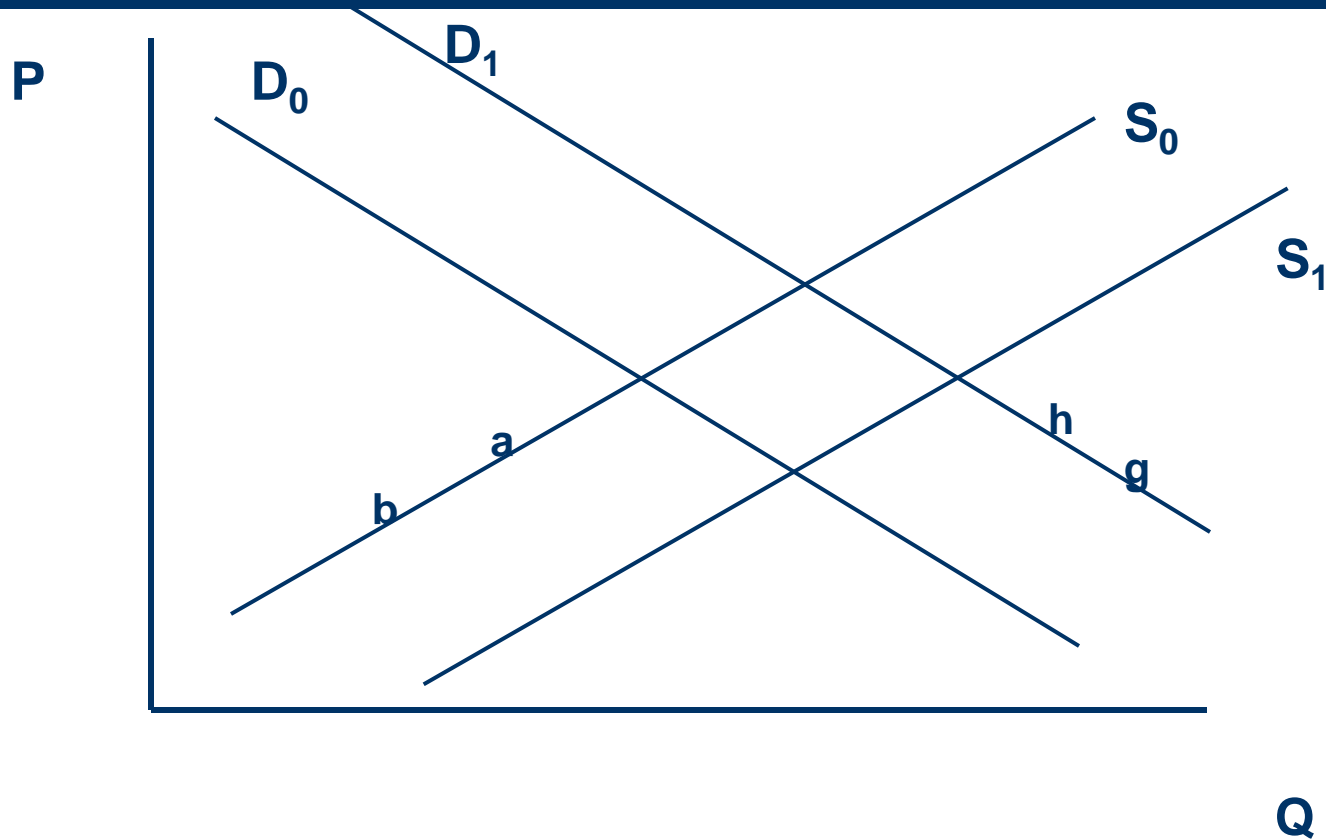
## QUESTIONS RELATING TO SLIDE 42

- **If consumers expect the price of potatoes to decrease, it will cause a shift or movement along the curve from ..... to .....**
- **The impact of a decrease in the price of potatoes on the quantity supplied is indicated by a shift or movement along the curve from ..... to .....**
- **Suppose the number of potato producers increase, it is indicated by a shift or movement along the curve from ..... to .....**

## QUESTIONS RELATING TO SLIDE 42

- If a cost-saving technological improvement in the production of potatoes is discovered, it is indicated by a shift or movement along the curve from ..... to .....
- If government increases its subsidy to potato farmers, it is indicated by a shift or movement along the curve from ..... to .....
- Suppose the population which consumes potatoes increases, it is reflected by a shift or movement along the curve from ..... to .....

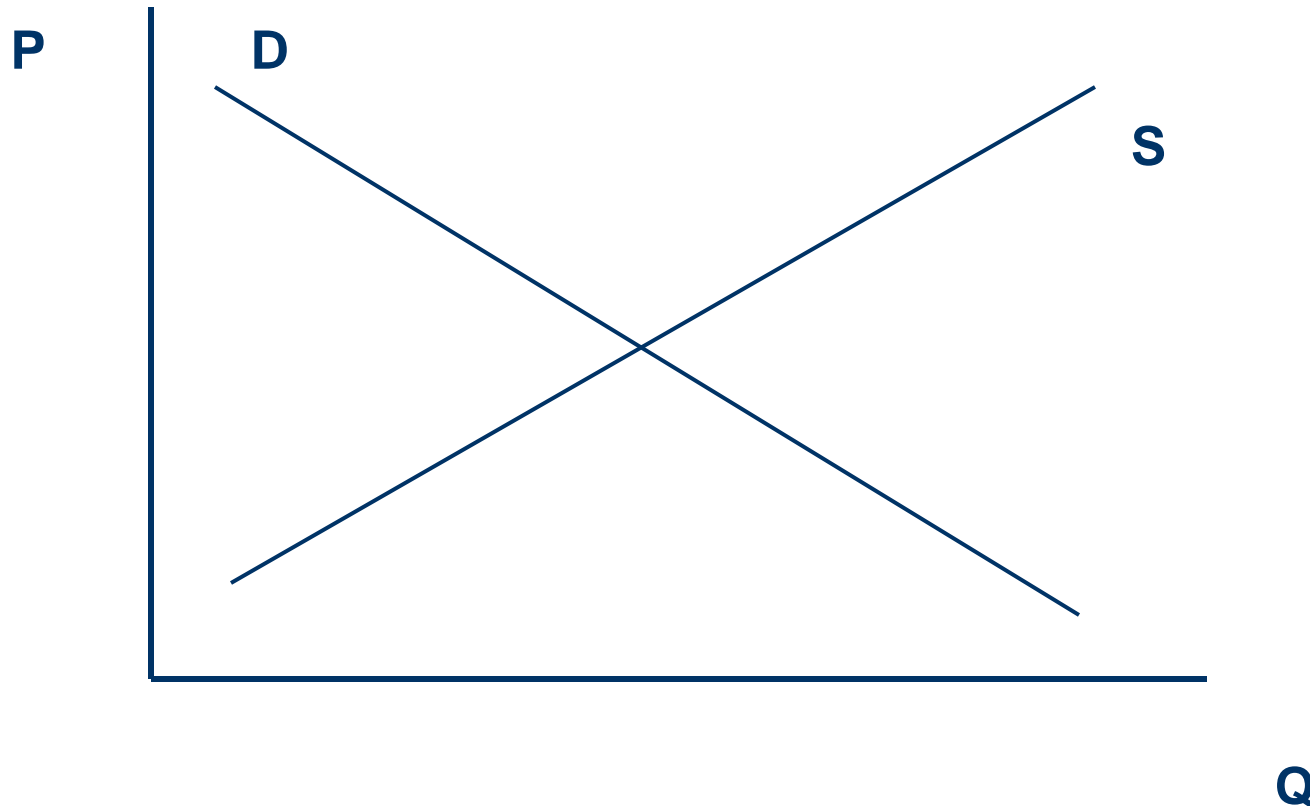
## Market demand and supply for Puma T-Shirts



## QUESTIONS RELATING TO SLIDE 46

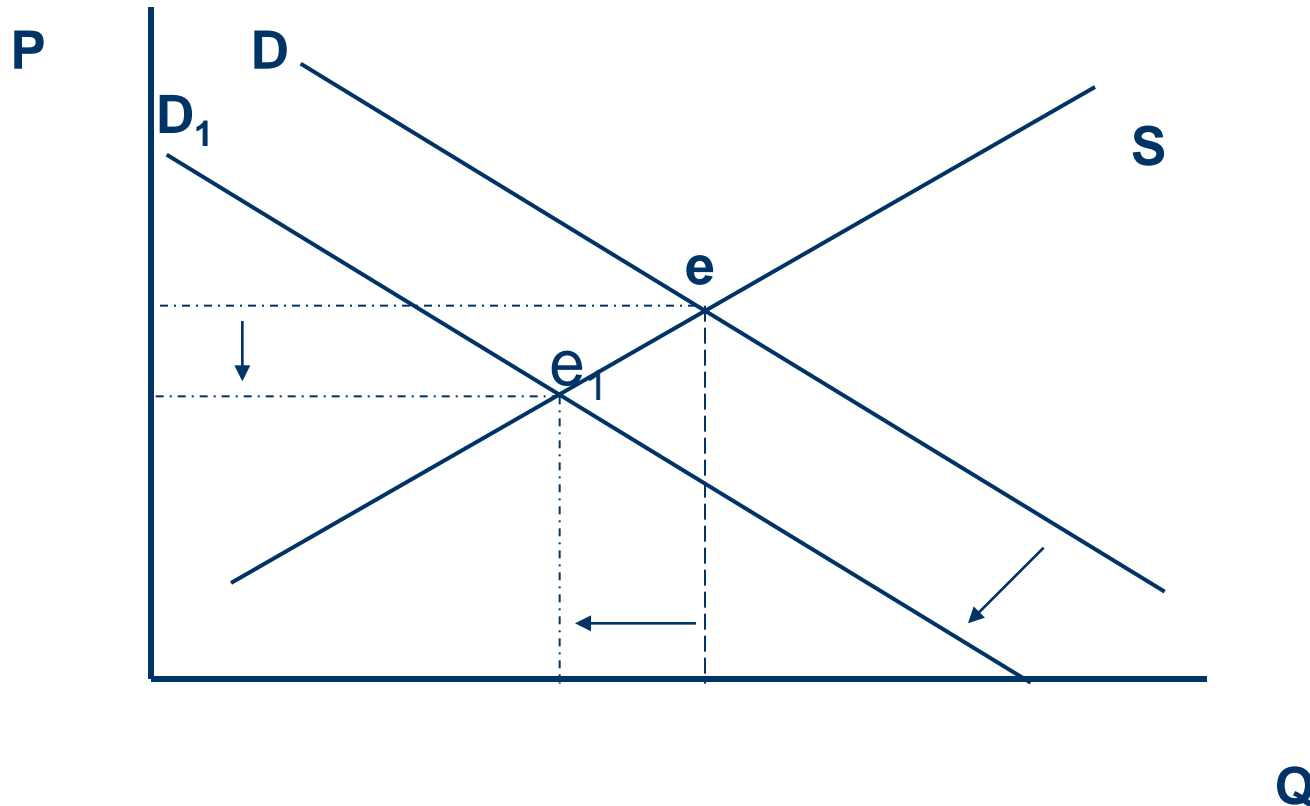
- If the price of Nike T-shirts (a substitute in consumption) increases, how will curves change?
- Which shift or movement represents a cost-saving technological change in the production of Puma T-shirts?
- If the price of Puma Track suites (a complement in consumption) increases, indicate the movement on the curves of Puma T-shirts.
- Which shift or movement represents an increase in the labour cost of factory workers in the Puma T-shirt factory?
- An increase in the price of Puma T-shirts on quantity supplied is reflected by which change in the curves?

**Indicate the effect of a decrease in the demand for the product on the equilibrium price and quantity?**





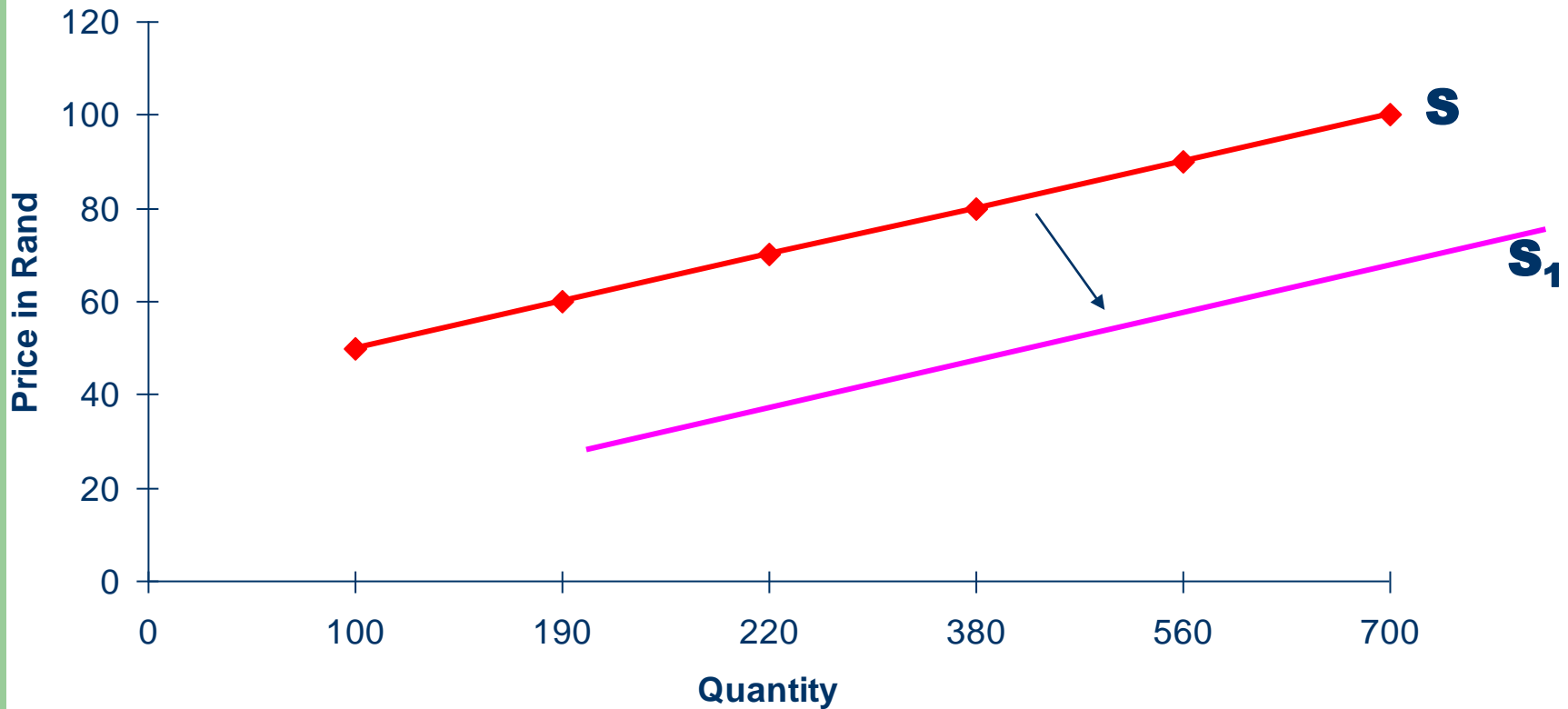
**Indicate the effect of a decrease in the demand for the product on the equilibrium price and quantity?**



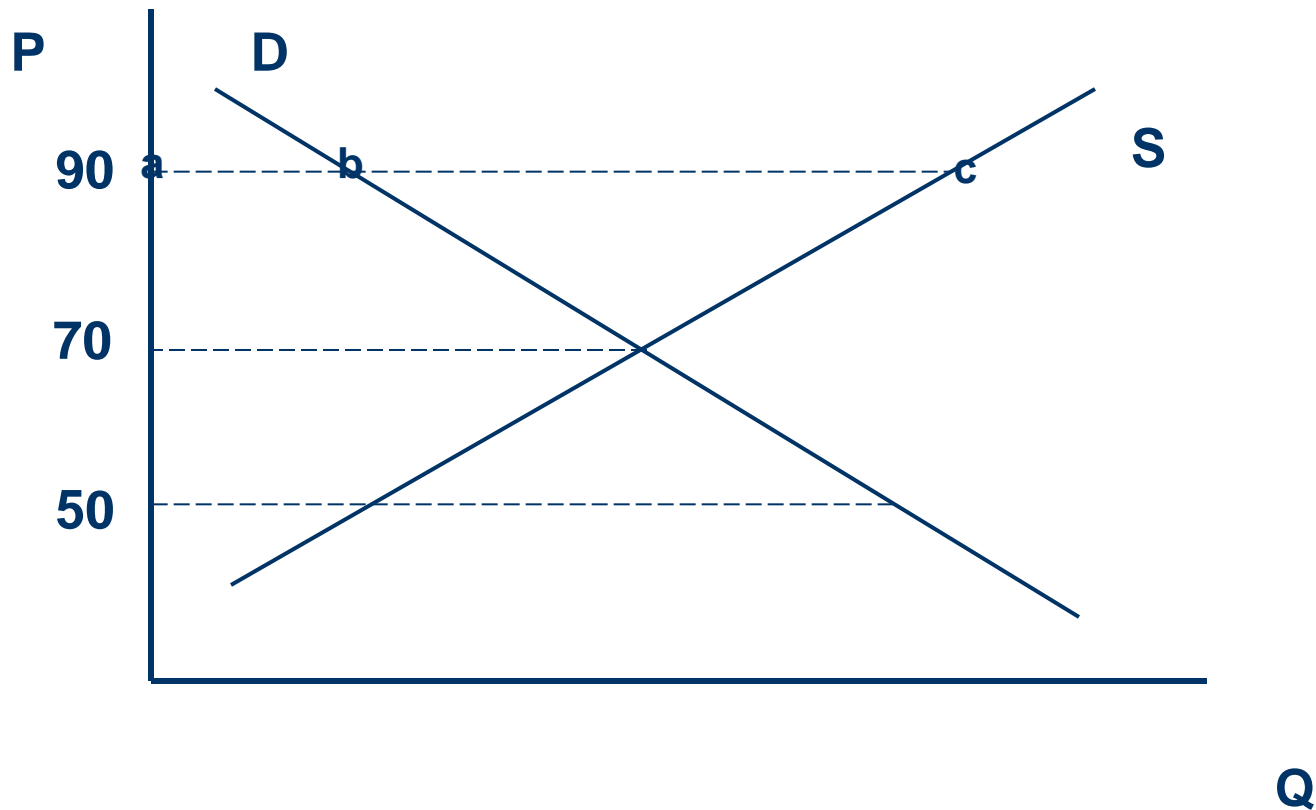
Make use of the set of axes in the diagram below to illustrate what will happen to the demand and/or supply curve of a consumable good if a cost-improving change in technology occurs, *ceteris paribus*.



Make use of the set of axes in the diagram below to illustrate what will happen to the demand and/or supply curve of a consumable good if a cost-improving change in technology occurs, *ceteris paribus*.



# THE MARKET MECHANISM



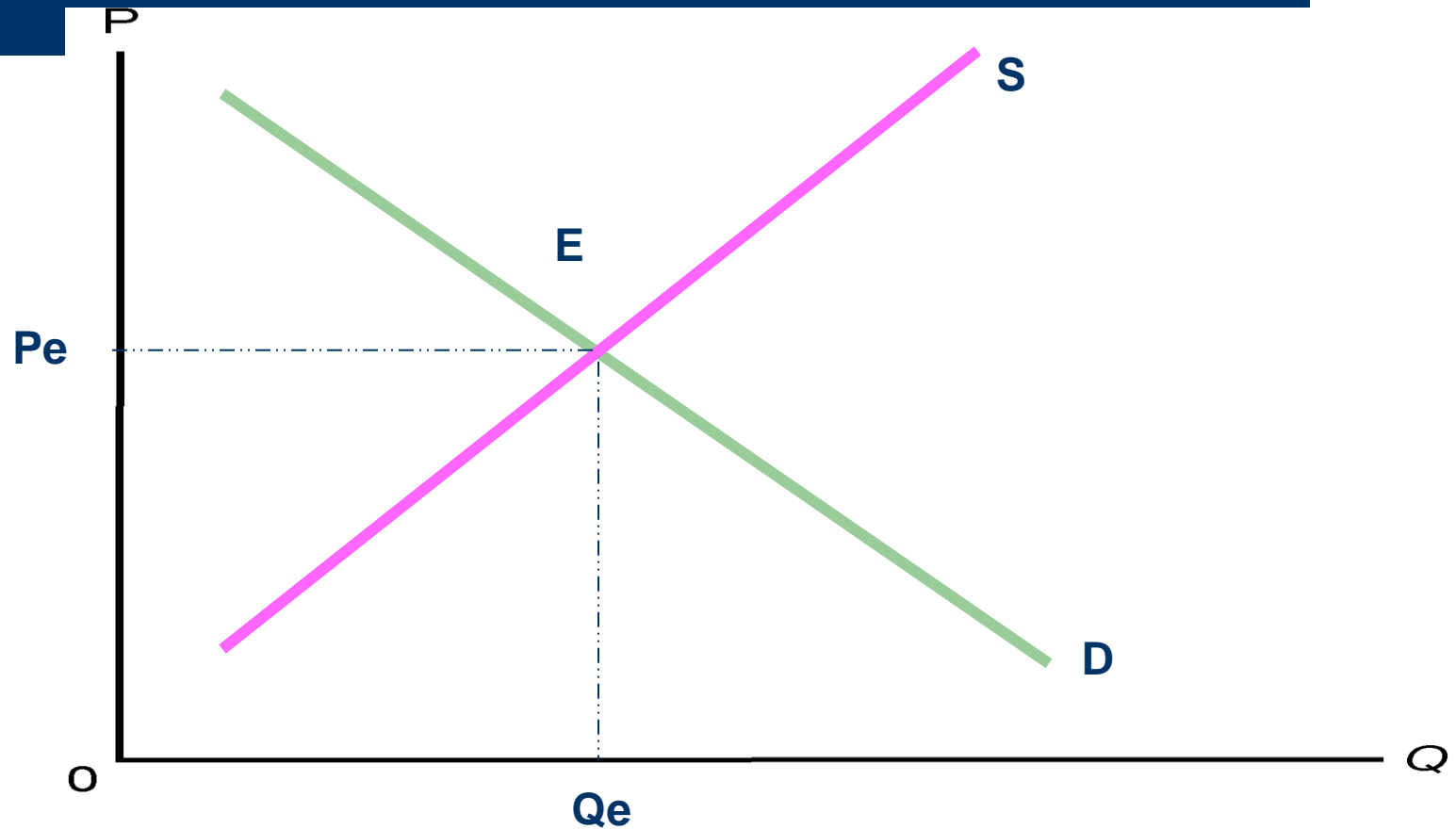
## QUESTIONS – BASED ON SLIDE 52

- **At which price level will the market experience excess supply?**
- **What happens at a price level of R50?**
- **Indicate the extend of excess demand on the graph?**
- **Suppose we experience excess supply in the market, what must happen to restore equilibrium?**
- **What is the extent of excess supply in the market?**

**Illustrate market equilibrium and indicate the equilibrium price and quantity.**

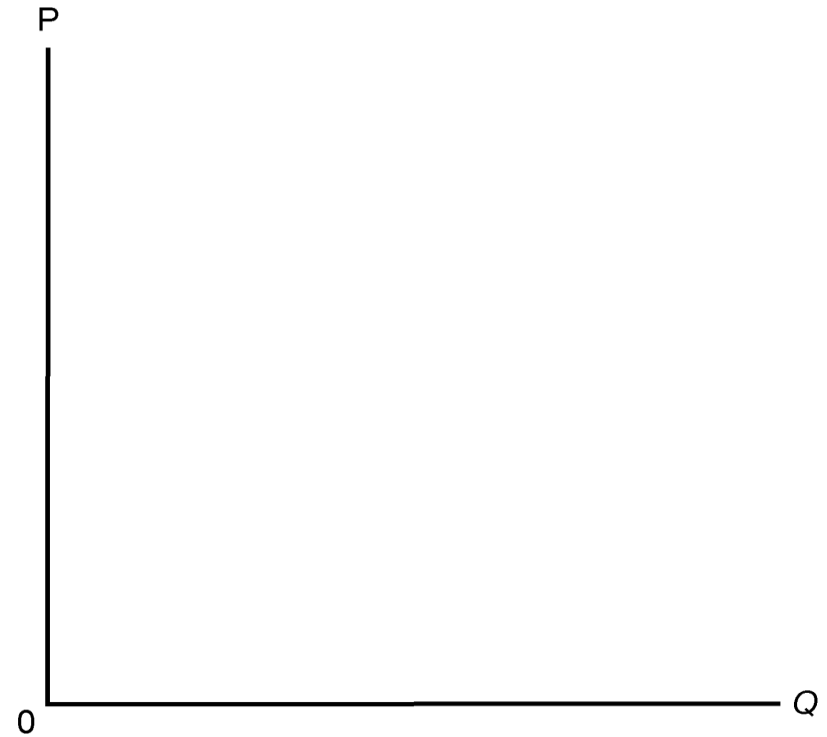
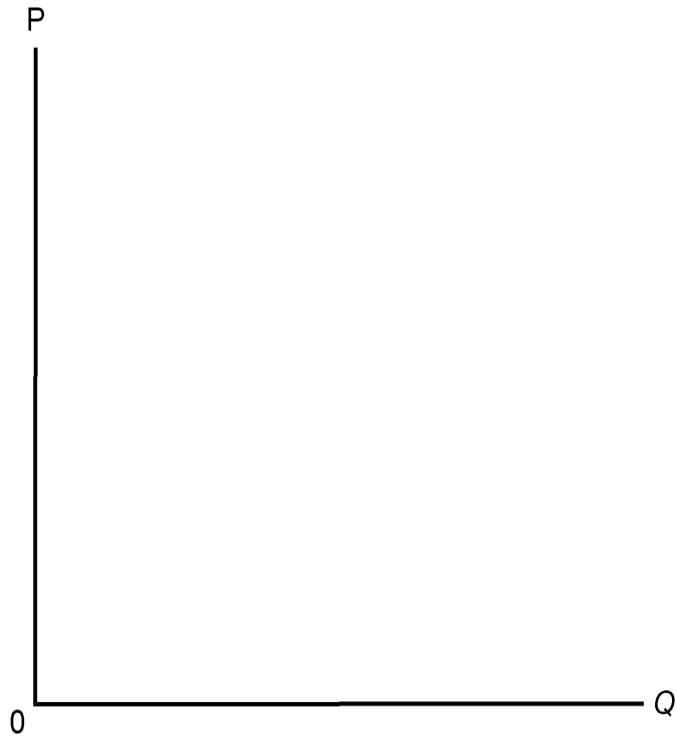


Illustrate market equilibrium and indicate the equilibrium price and quantity.



A decrease in the price of T-shirts supplied.

An increase in the demand for 'Handy Andy'





## SHORTER QUESTIONS

- **If there is a successful advertising campaign for milk, then**
  - (a) the demand for milk decreases.
  - (b) the demand for milk increases.
  - (c) the supply of milk increases.
  - (d) the supply of milk decreases.
  
- **If the price of domestic airline tickets increases, the demand for**
  - (a) domestic air travel increases
  - (b) car rentals, a complement in consumption, increases
  - (c) domestic air travel decreases
  - (d) car rentals , a complement in consumption, decreases

## SHORTER QUESTIONS

- **If there is an increase in the price of broccoli, a substitute in production for beans, then the**
  - (a) supply curve for broccoli decreases.
  - (b) supply of beans increases.
  - (c) demand curve for broccoli increases.
  - (d) supply curve for beans increases.
- **If there is a technological breakthrough in the beer manufacturing process, the**
  - (a) supply of beer will decrease.
  - (b) demand for beer will increase.
  - (c) supply of beer will increase.
  - (d) demand for beer decrease.