



# **STUDY UNIT 4**

## **DEMAND AND SUPPLY**

# 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**

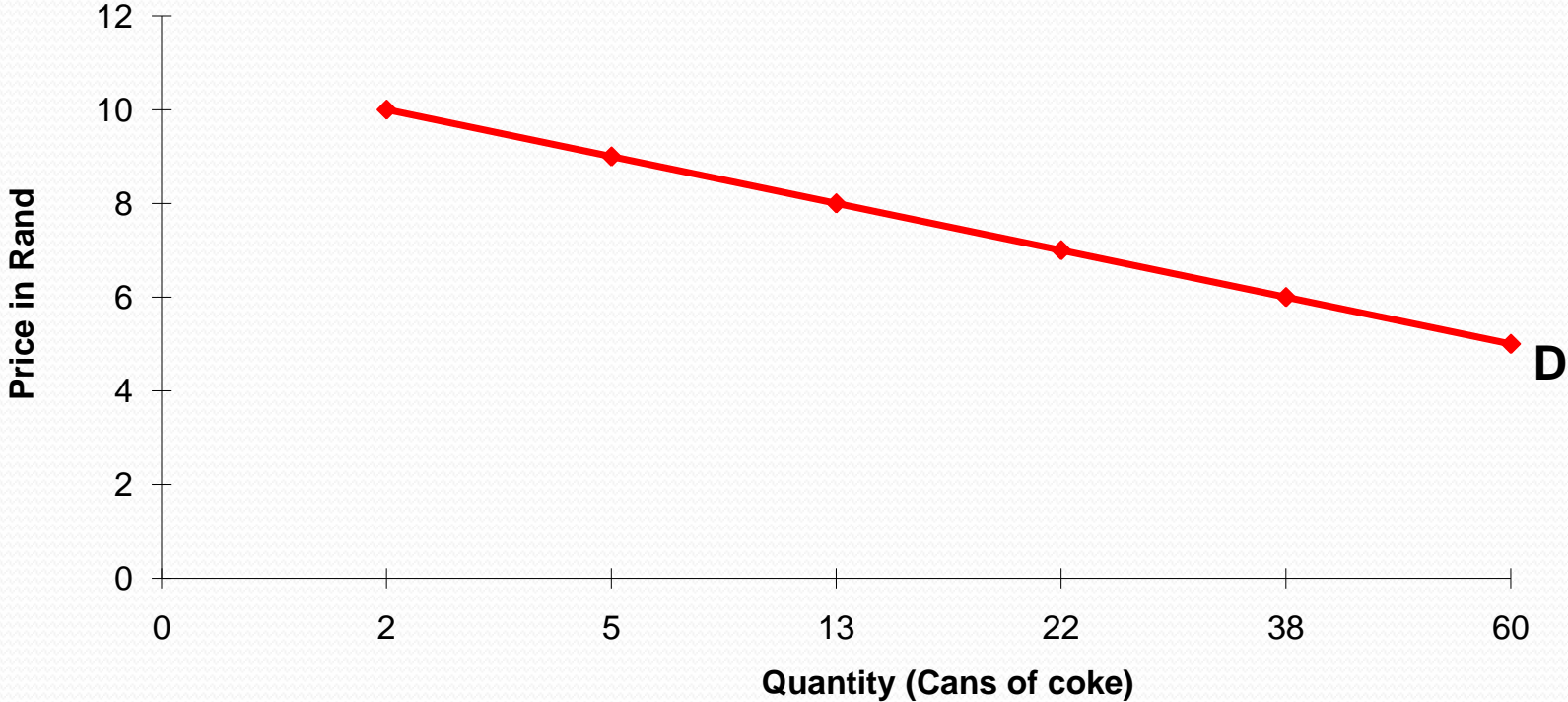
## DEMAND – CONSUMERS side of the economy

- Definition of demand
- Individual demand vs market demand
- Determinants of demand: ( $P_g$ ,  $P_x$ ,  $P_f$ ,  $T$ ,  $Y$ ,  $N$ )
- LAW OF DEMAND
- Illustrating the law of demand
  - $P \uparrow \rightarrow Q_d \downarrow$
  - $P \downarrow \rightarrow Q_d \uparrow$
- Importance of *ceteris paribus* assumption
- Demand schedule
- Graphic derivation of a demand curve

# DEMAND SCHEDULE

PRICE PER CAN OF COKE	QUANTITY DEMANDED (CANS)
R5	60
R6	38
R7	22
R8	13
R9	5
R10	2

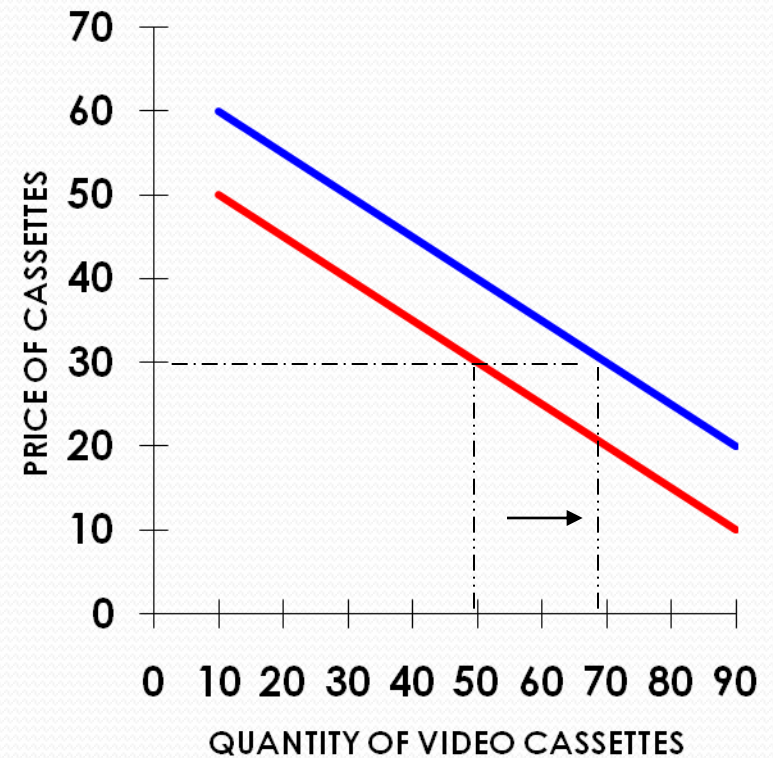
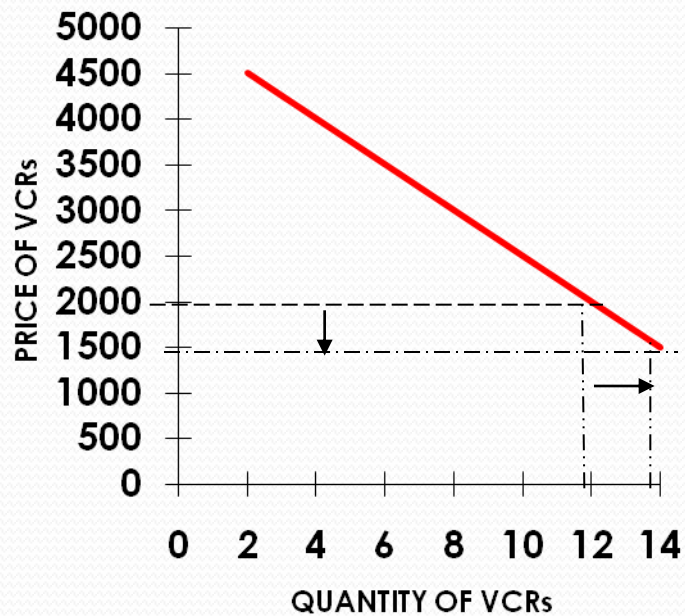
# DEMAND CURVE



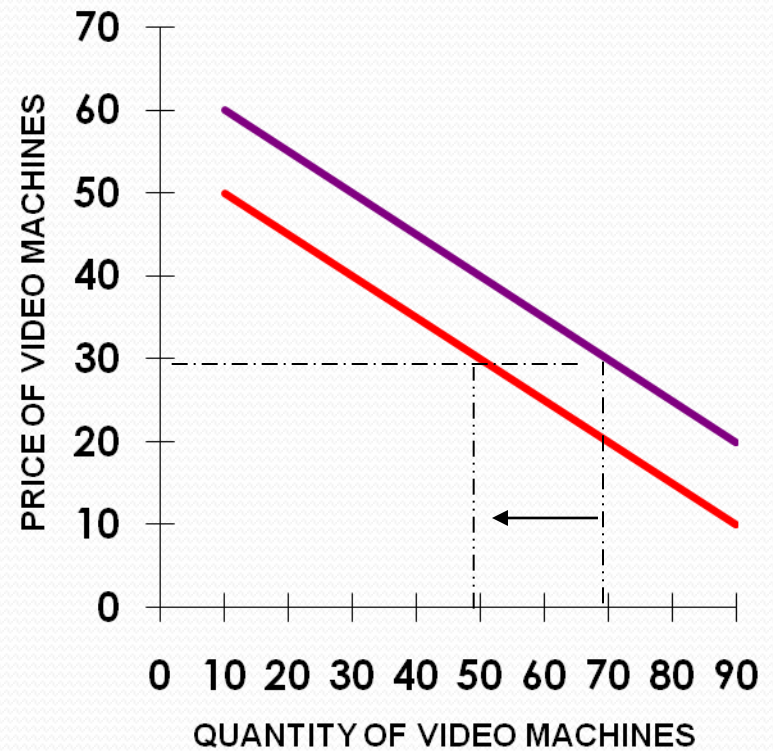
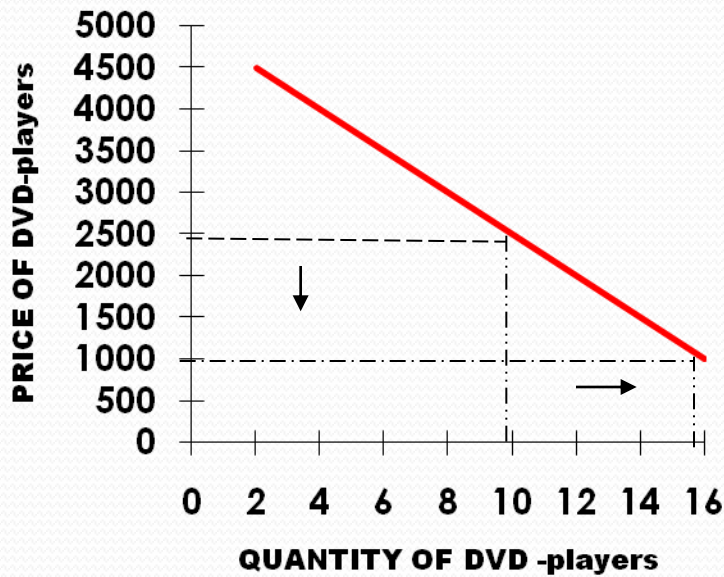
# MOVEMENT ALONG THE DEMAND CURVE vs SHIFTS OF THE DEMAND CURVE

- **Change in quantity demanded (movement along demand curve):**
  - Cause(s)
  - Illustration
- **Change in demand (shift of demand curve):**
  - Causes
  - Illustration
- **SUMMARY OF DETERMINANTS OF DEMAND (Table 7-3):**
  - Price of the good
  - Consumer's income
  - Prices of complements and substitutes in consumption
  - Consumers' tastes or preferences
  - Number of buyers (population served by the specific market)
  - Expected future prices

# Complements in consumption



# Substitutes in consumption





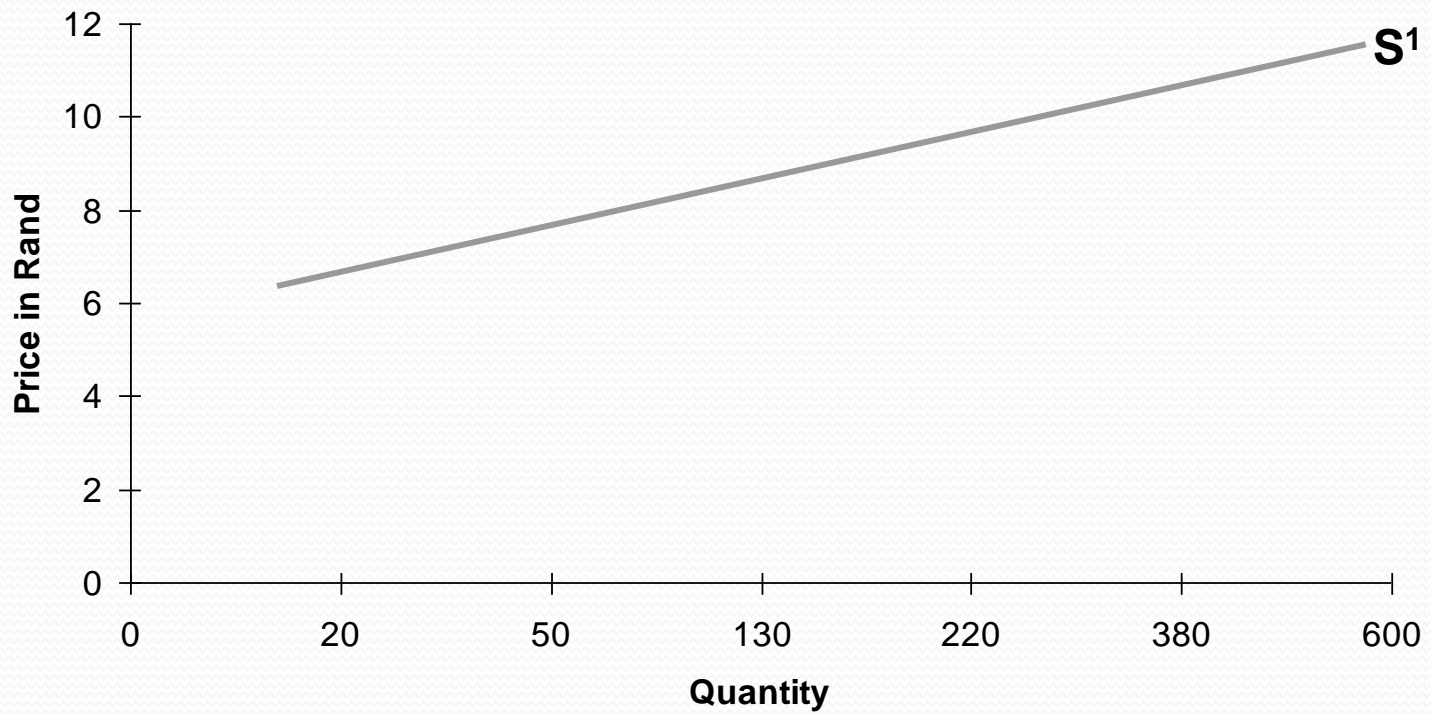
## SUPPLY – (PRODUCERS)

- Definition of supply
- Determinants of supply
- Individual supply vs market supply
- LAW OF SUPPLY
- Importance of *ceteris paribus* assumption
- Illustrating the law of supply
  - $P \uparrow \rightarrow Q_s \uparrow$
  - $P \downarrow \rightarrow Q_s \downarrow$
- SUPPLY SCHEDULE
- GRAPHIC ILLUSTRATION

## SUPPLY SCHEDULE

<b>PRICE PER CAN OF COKE</b>	<b>QUANTITY SUPPLIED</b>
<b>R6</b>	<b>15</b>
<b>R7</b>	<b>40</b>
<b>R8</b>	<b>50</b>
<b>R9</b>	<b>130</b>
<b>R10</b>	<b>220</b>
<b>R12</b>	<b>600</b>

## SUPPLY CURVE



## Movement along the supply curve vs shifts of the supply curve

- **Change in quantity supplied (movement along supply curve):**
  - Cause(s)
  - Illustration
- **Change in supply (shift of supply curve):**
  - Causes
  - Illustration
- **SUMMARY OF DETERMINANTS OF SUPPLY (Table 7-5):**
  - Price of the good
  - Prices of inputs (factors of production)
  - Prices of complements and substitutes in production
  - Technology
  - Number of firms
  - Expected future prices

# MARKET EQUILIBRIUM

- **Definition:**

- Where  $Q_d = Q_s$ ; **NOT** where demand = supply !!!!
- Shown by the point where DD and SS curves intersect.
- There is **NO EXCESS** demand nor **EXCESS SUPPLY** at equilibrium.

- **Disequilibrium:**

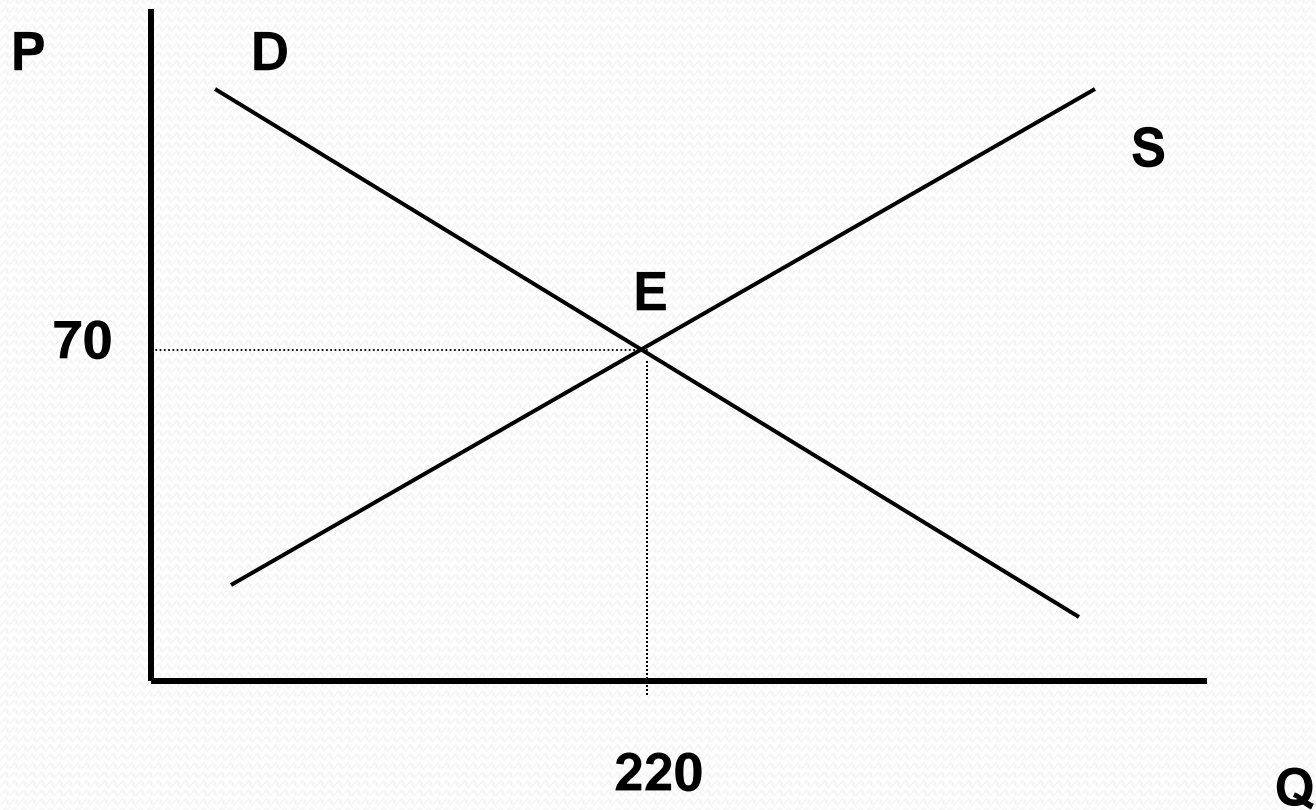
- Definition
- Implications in the market

- **How is equilibrium restored?**

## DEMAND AND SUPPLY SCHEDULES

Price	Quantity demanded	Quantity supplied	Excess demand/ excess supply
R50	600	100	500 (excess DD)
R60	380	190	190 (excess DD)
R70	220	220	0 (equilibrium)
R80	130	380	250 (excess SS)
R90	50	560	510 (excess SS)

## THE MARKET EQUILIBRIUM



# CLASS ACTIVITY –Demand and supply

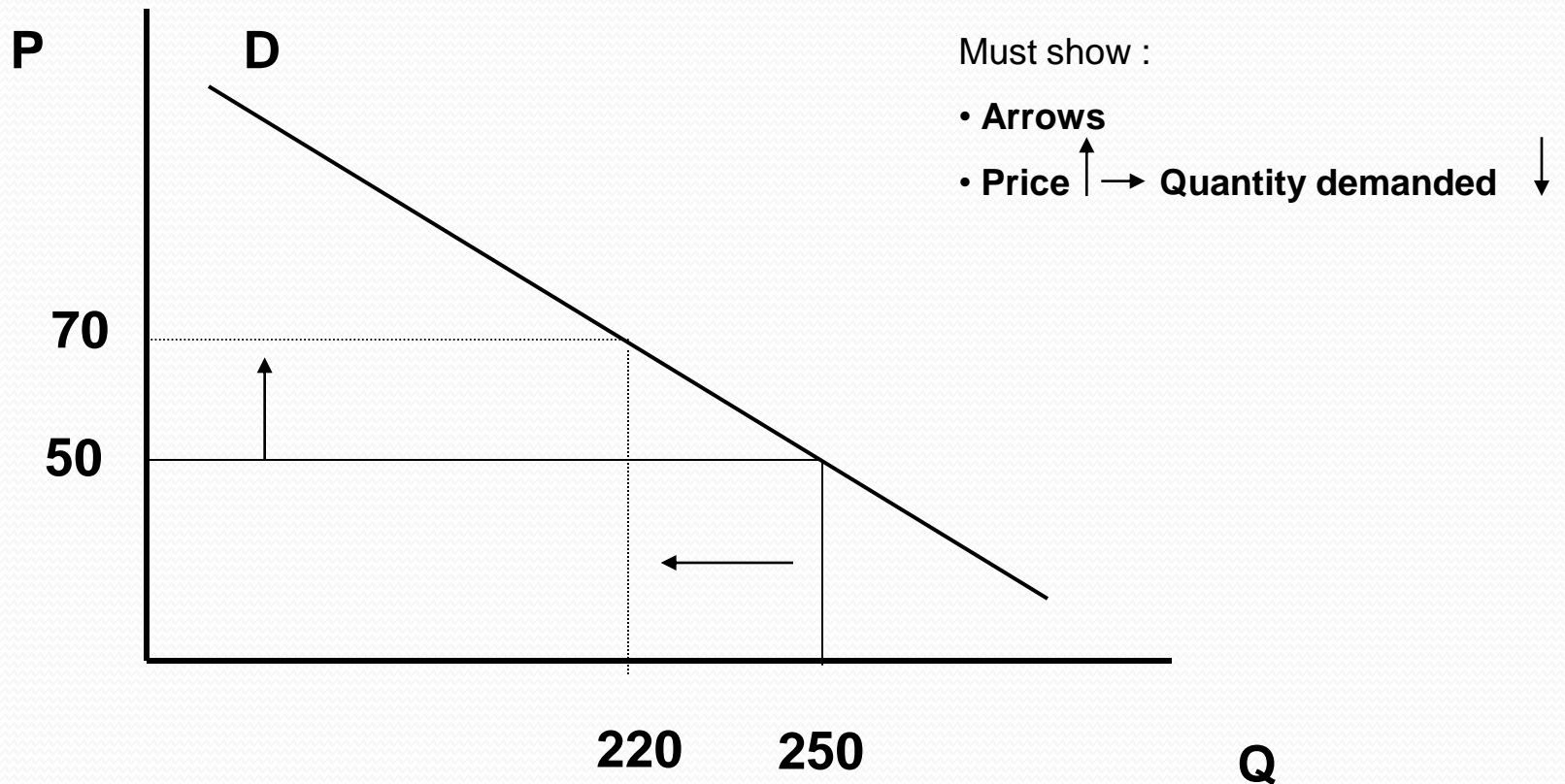
1. An increase in the price of a substitute product in **consumption** will shift the ..... curve to the ..... [Hint: demand , supply, left, right]
2. An increase in the price of a substitute product in **production** shift the .....curve to the .....



## ILLUSTRATE THE LAW OF DEMAND GRAPHICALLY



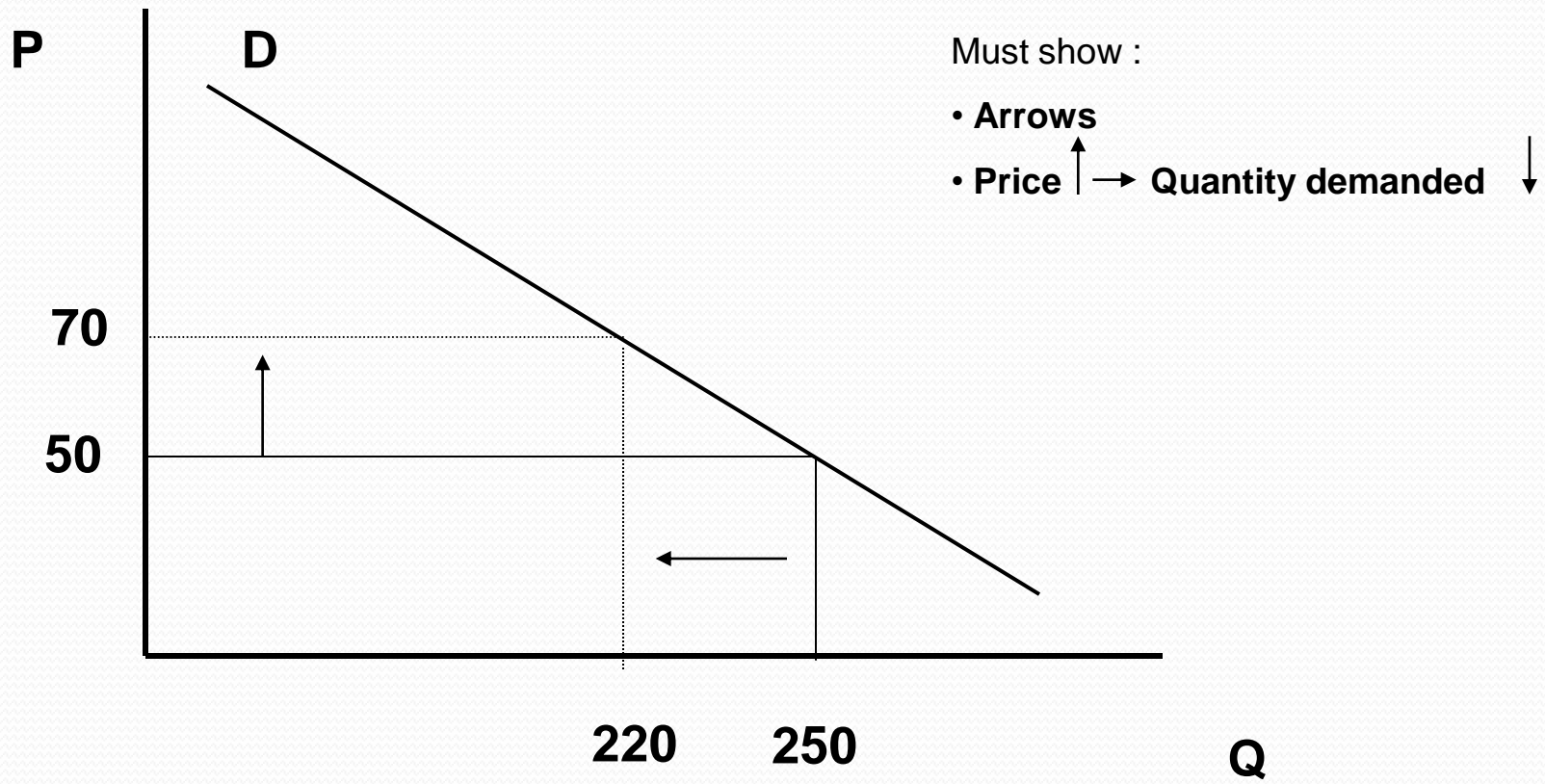
## ILLUSTRATE THE LAW OF DEMAND GRAPHICALLY



ILLUSTRATE AN INCREASE IN THE PRICE OF BEEF DEMANDED



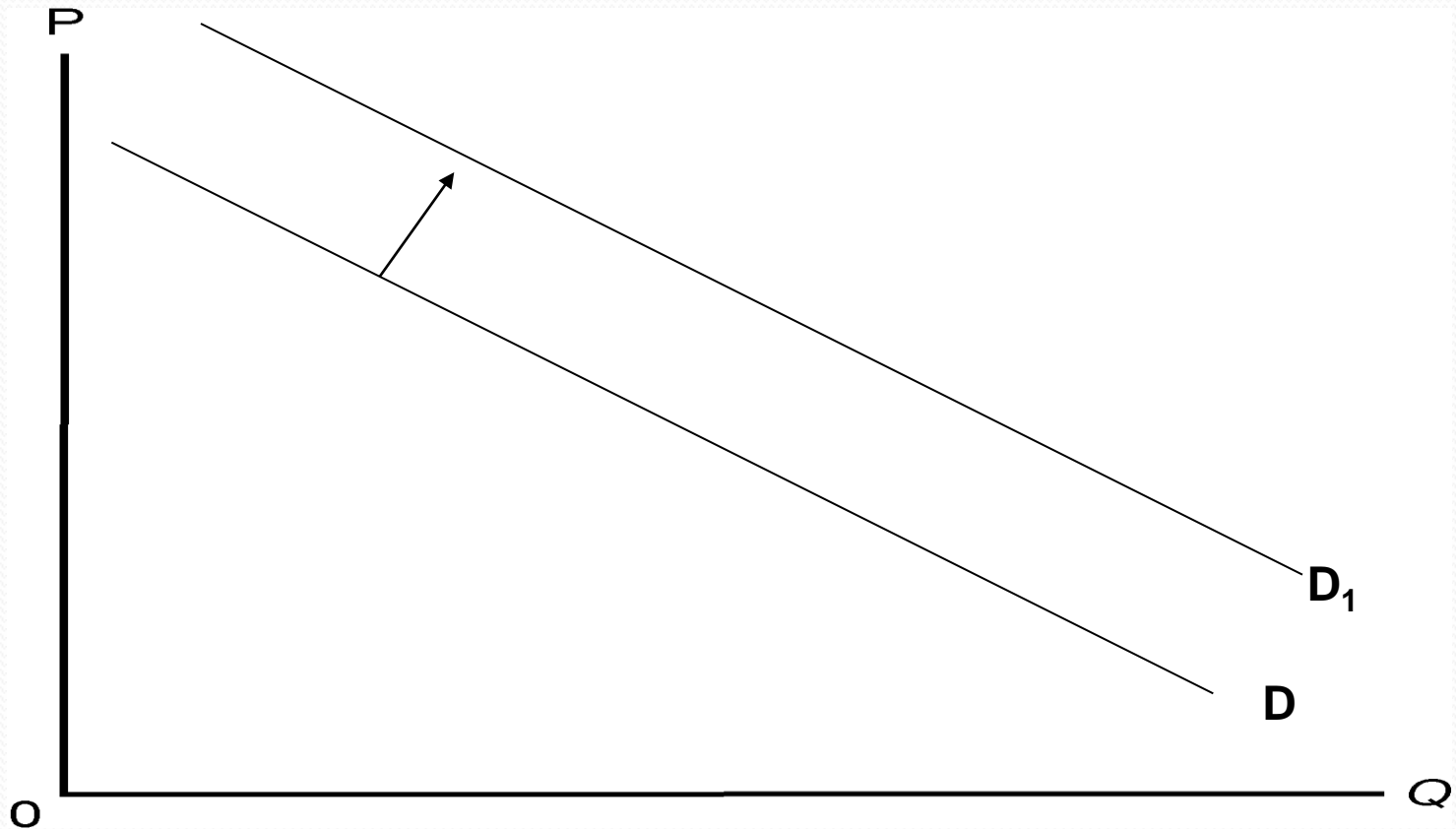
# ILLUSTRATE AN INCREASE IN THE PRICE OF BEEF DEMANDED



ILLUSTRATE WHAT HAPPENS TO DEMAND OR SUPPLY IF THERE IS AN INCREASE IN INCOME (CASE OF NORMAL GOOD)



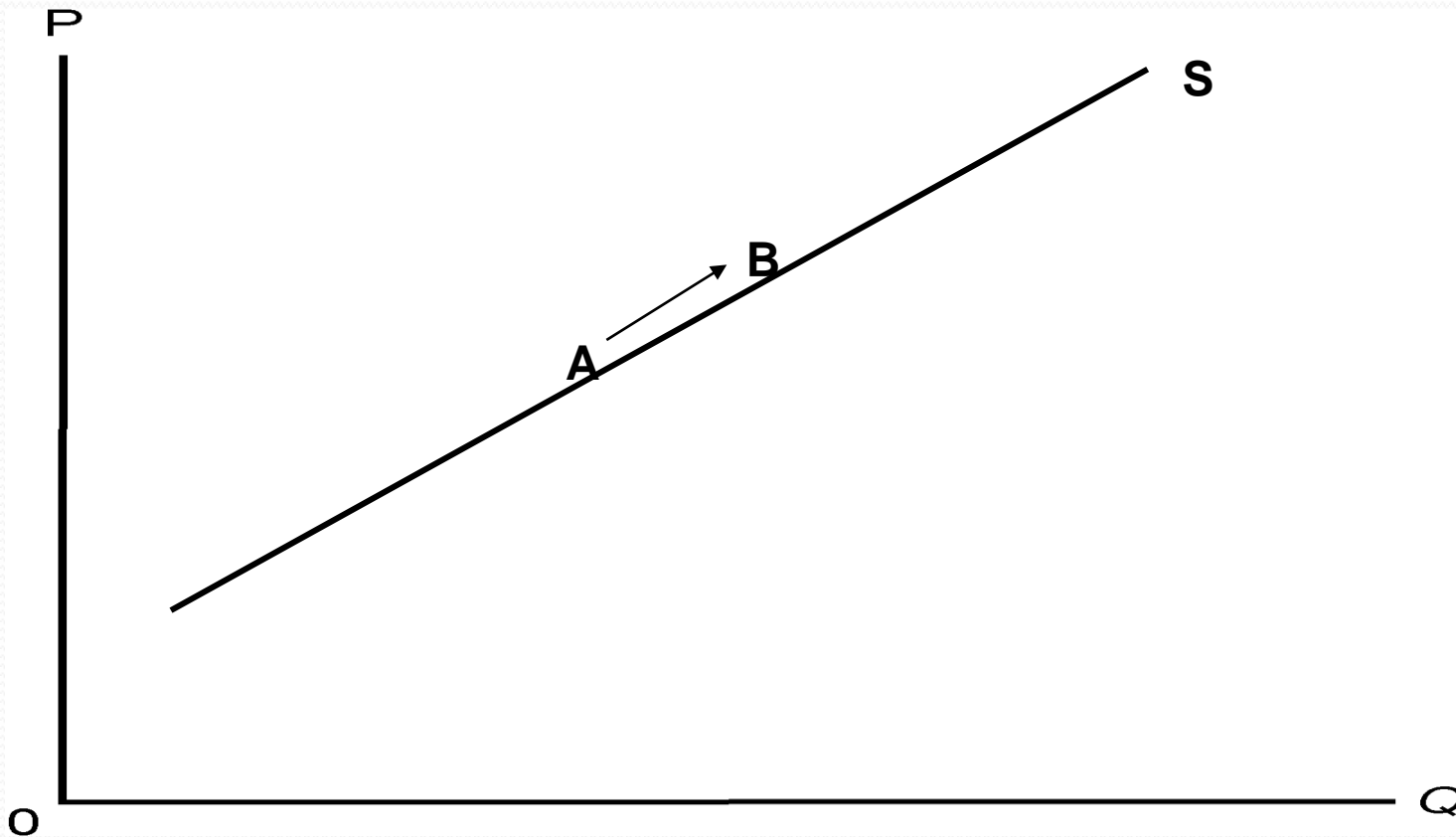
ILLUSTRATE WHAT HAPPENS TO DEMAND OR SUPPLY IF THERE IS AN INCREASE IN INCOME (CASE OF NORMAL GOOD)



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

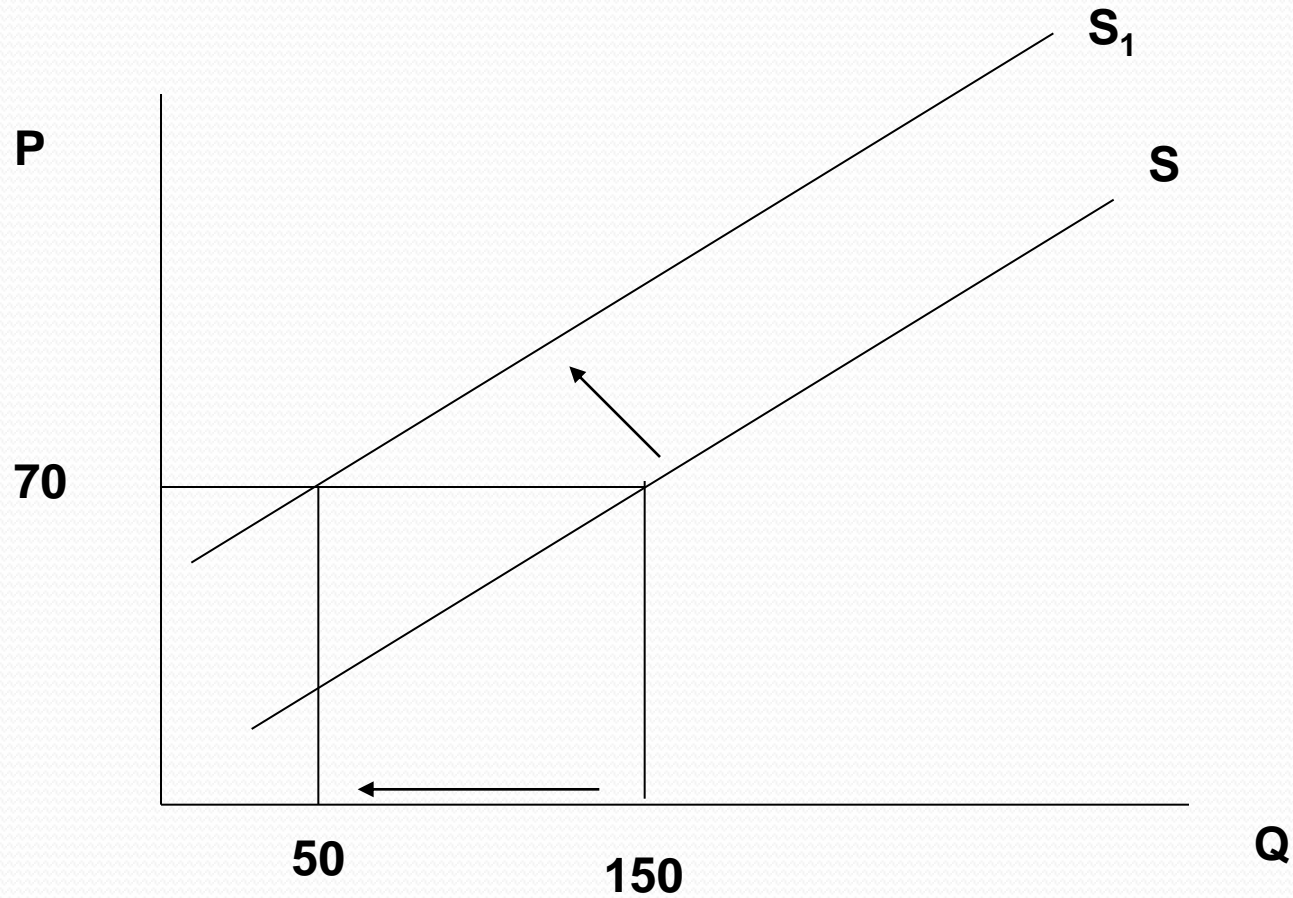


ILLUSTRATE WHAT HAPPENS TO THE SUPPLY CURVE IF THE PRICE OF THE PRODUCT SUPPLIED INCREASES





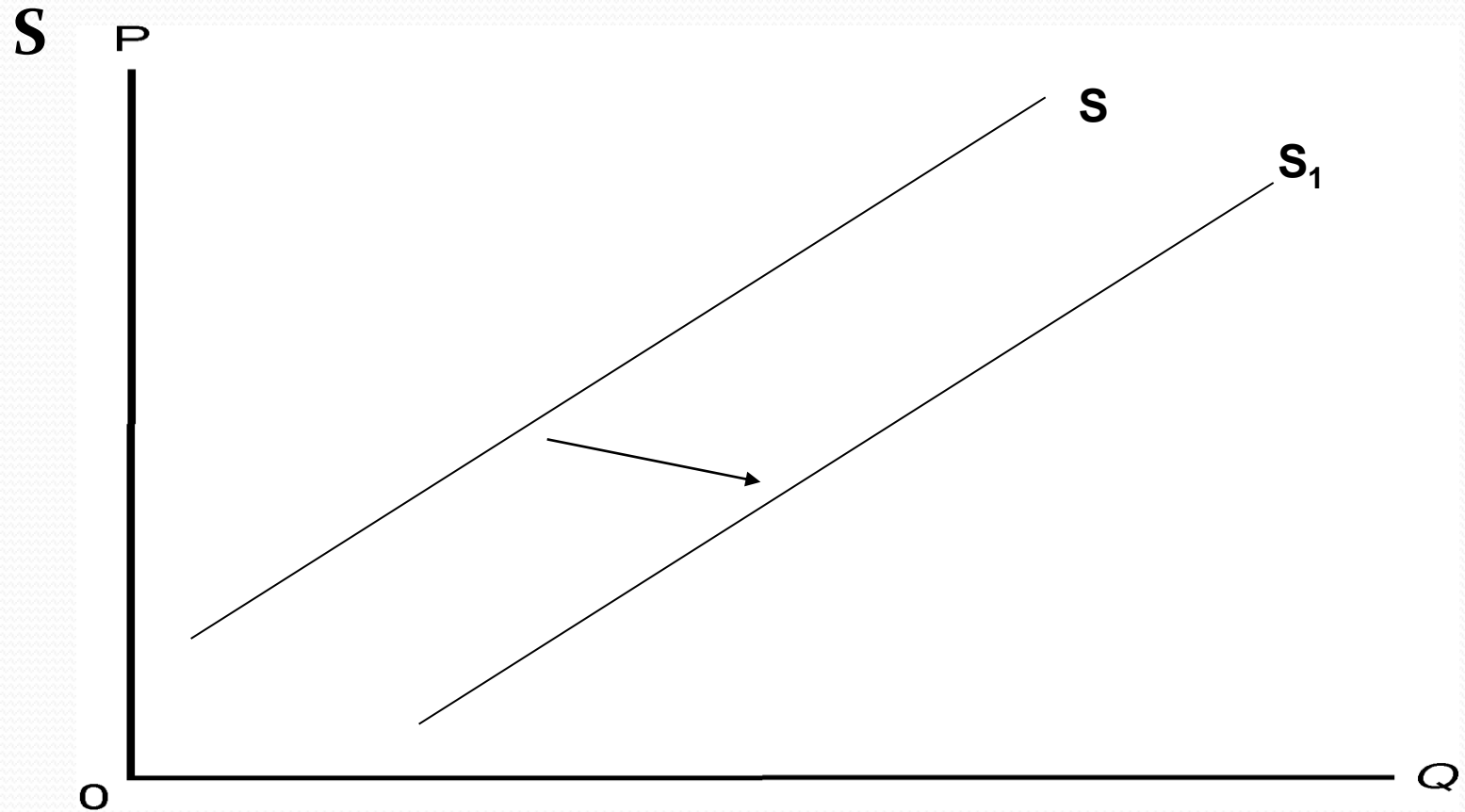
# EFFECT OF AN INCREASE IN LABOUR COST ON SUPPLY OF CLOTHING

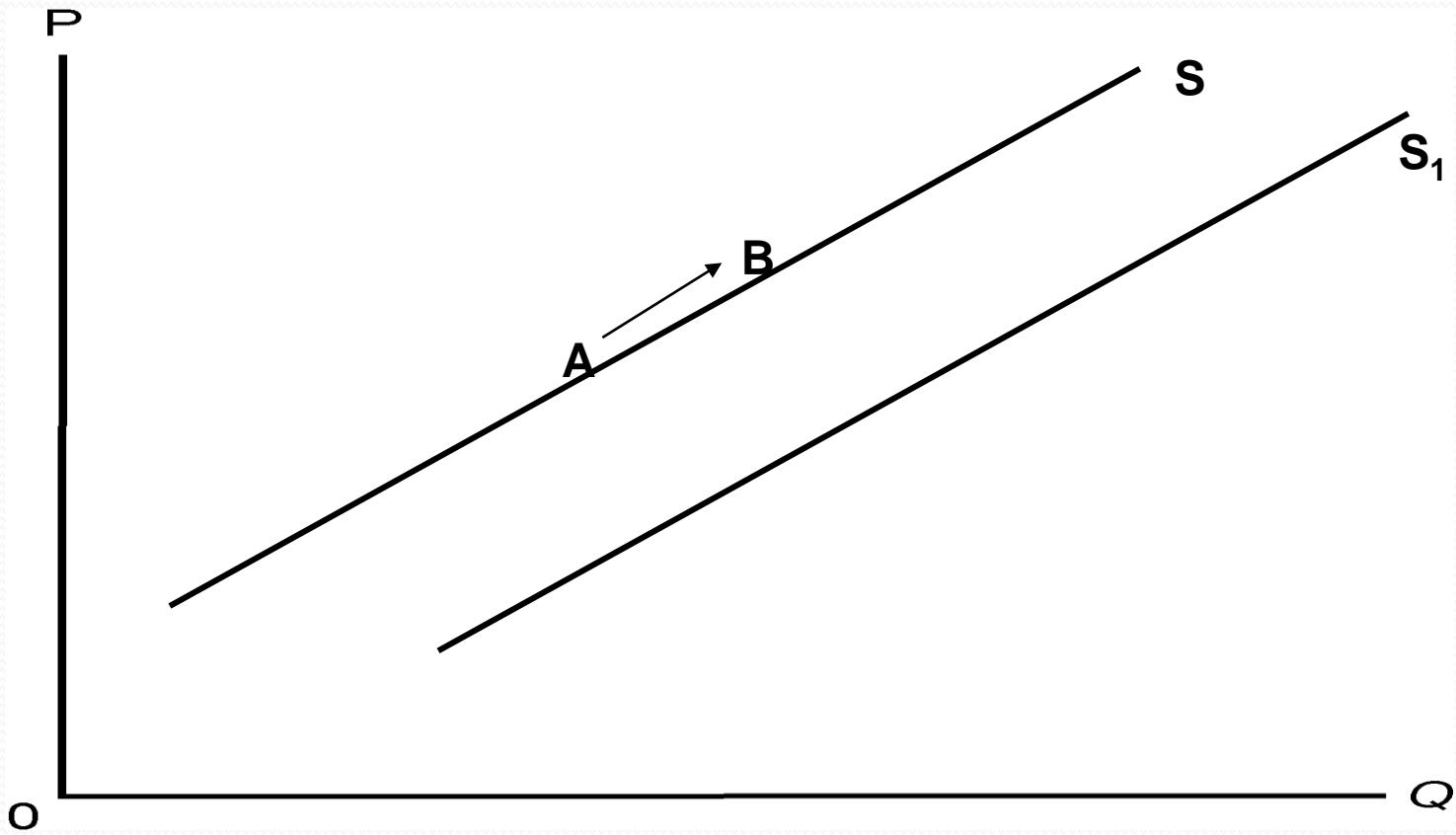


ILLUSTRATE WHAT HAPPENS TO THE DEMAND OR SUPPLY CURVES IF A COST REDUCING TECHNOLOGY IS IMPLEMENTED



ILLUSTRATE WHAT HAPPENS TO THE DEMAND OR SUPPLY CURVES IF A COST REDUCING TECHNOLOGY IS IMPLEMENTED

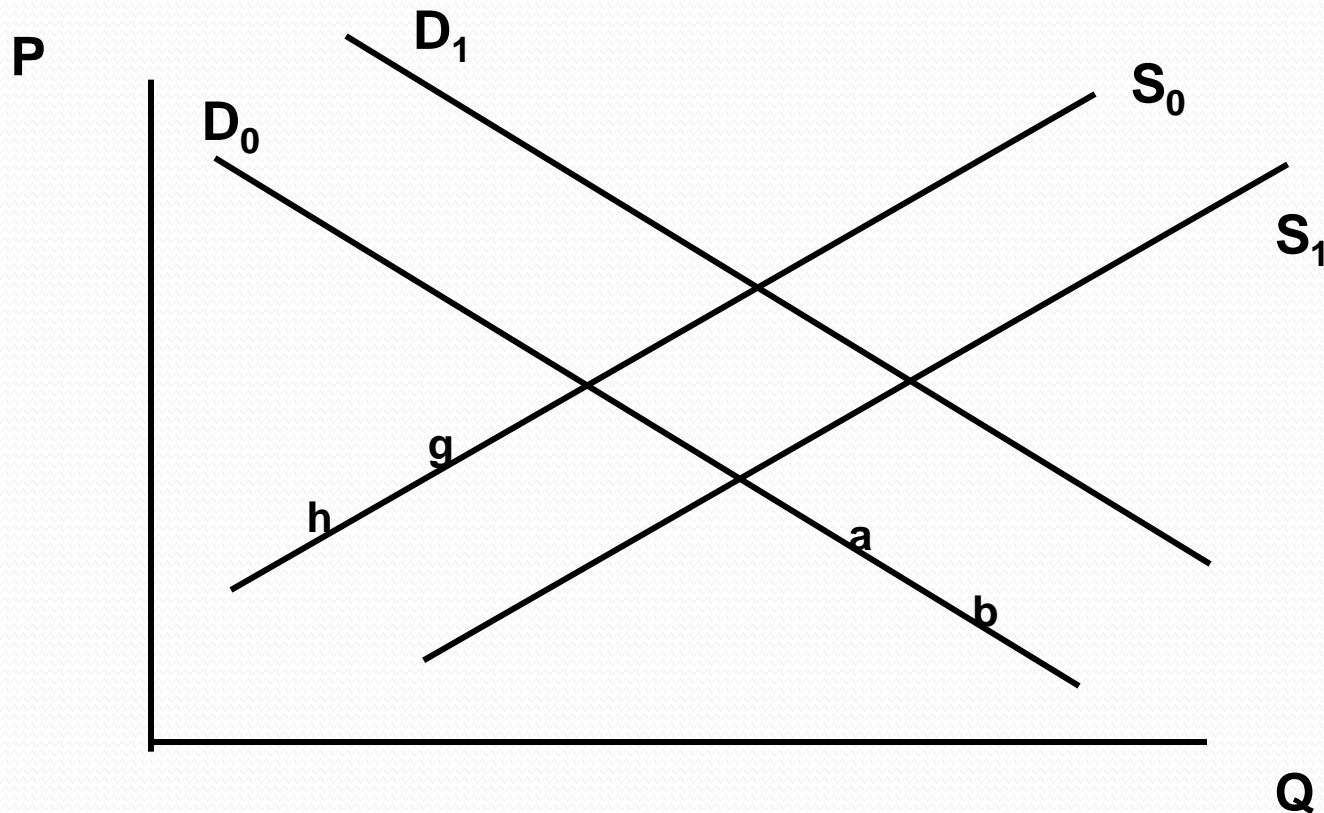




## QUESTIONS TO SLIDE 26

- 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 demand and supply curves



## QUESTIONS

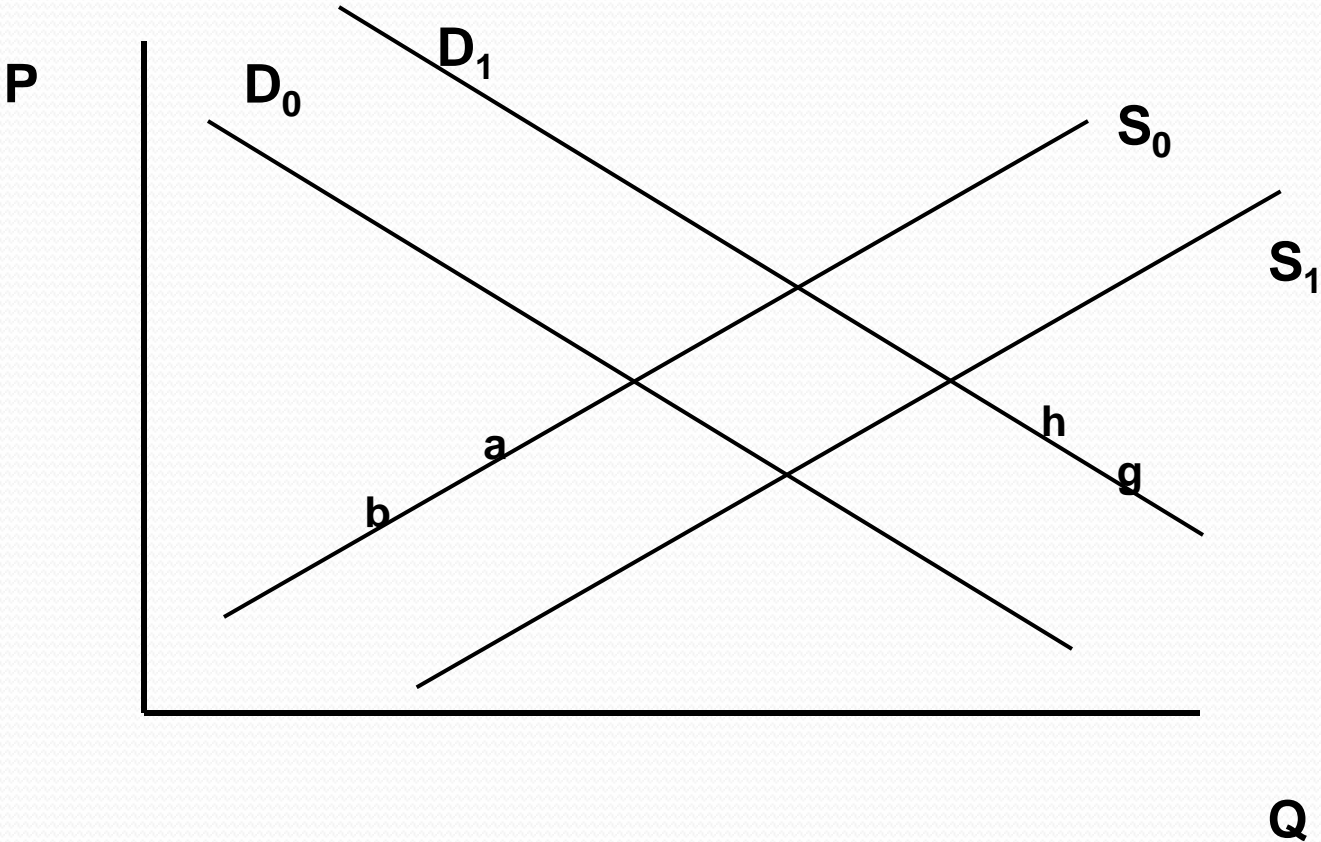
- Which movement or shift in the graph indicates an improvement in productivity?
- Which movement or shift in the graph indicates an increase in the cost of labour?
- What could cause the movement from point b to point a?
- If the price of a complement in consumption decreases, which movement or shift would represent this change?
- If the price of a substitute in production increases, which movement or shift would represent this?

## QUESTIONS cont...

- If consumers expect the price of the product to decrease, it will cause a shift or movement along the curve from ..... to .....
- The impact of a decrease in the price of product on the quantity supplied is indicated by a shift or movement along the curve from ..... to .....
- Suppose the population consuming the product decreases, this is indicated by a shift or movement along the curve from ..... to .....



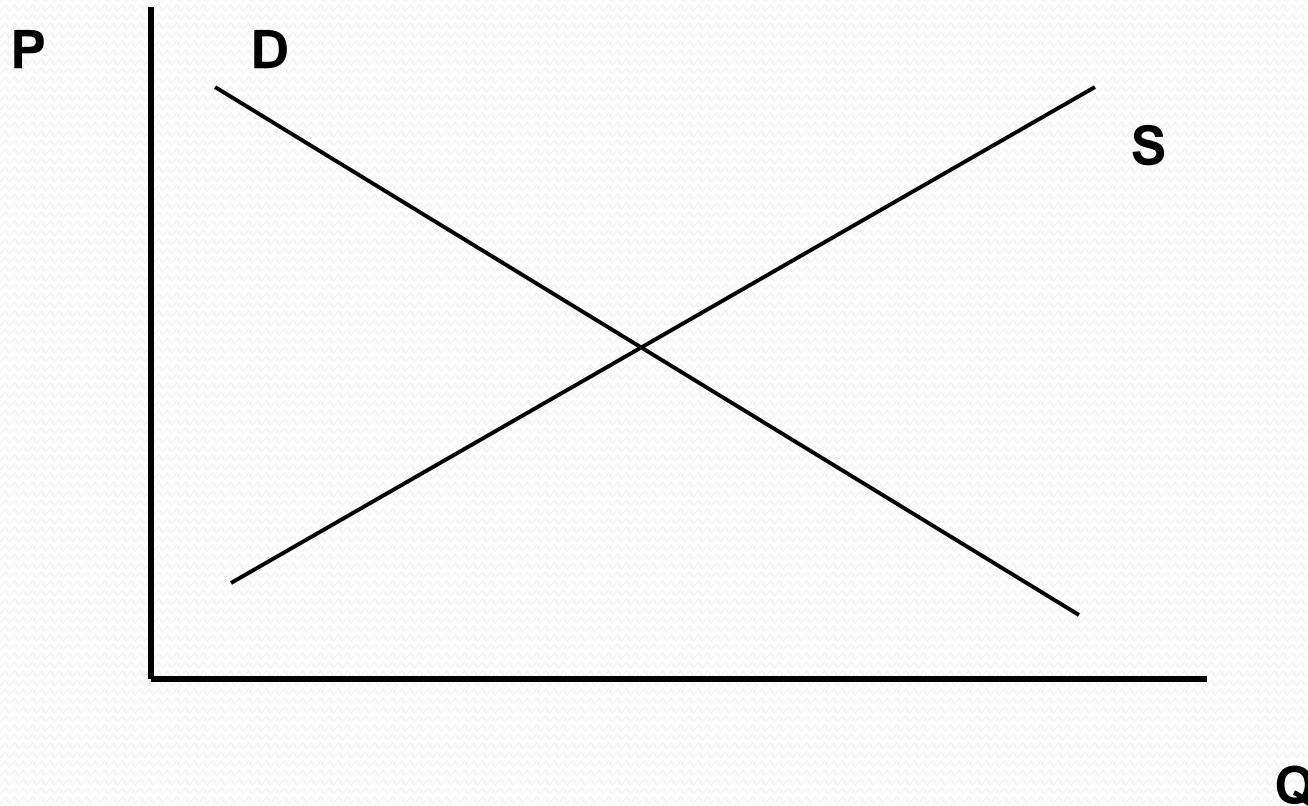
# Market demand and supply for Puma T-Shirts



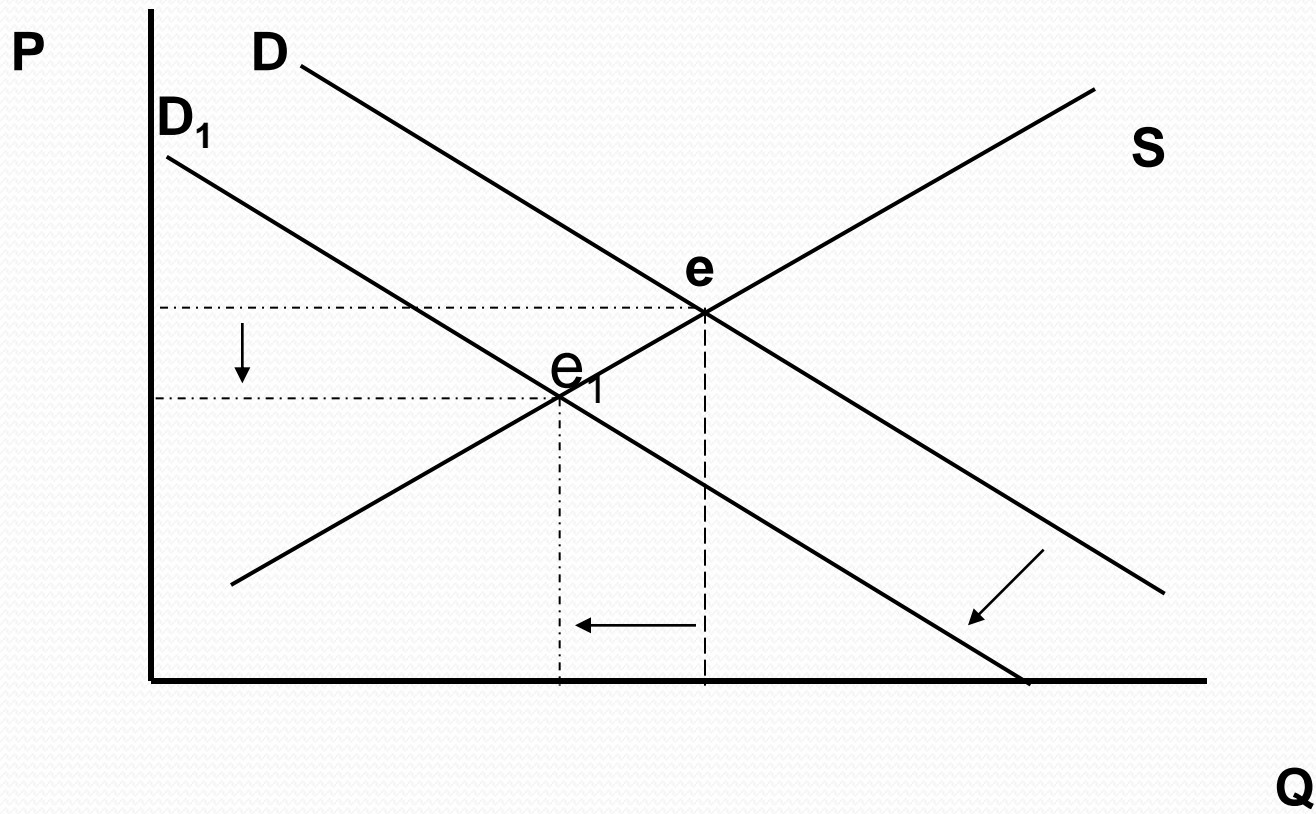
## QUESTIONS RELATING TO SLIDE 33

- If the price of Nike T-shirts (a substitute in consumption) increases, how will curves change?
- Which shift or movement represents an increase in expected future prices 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?**



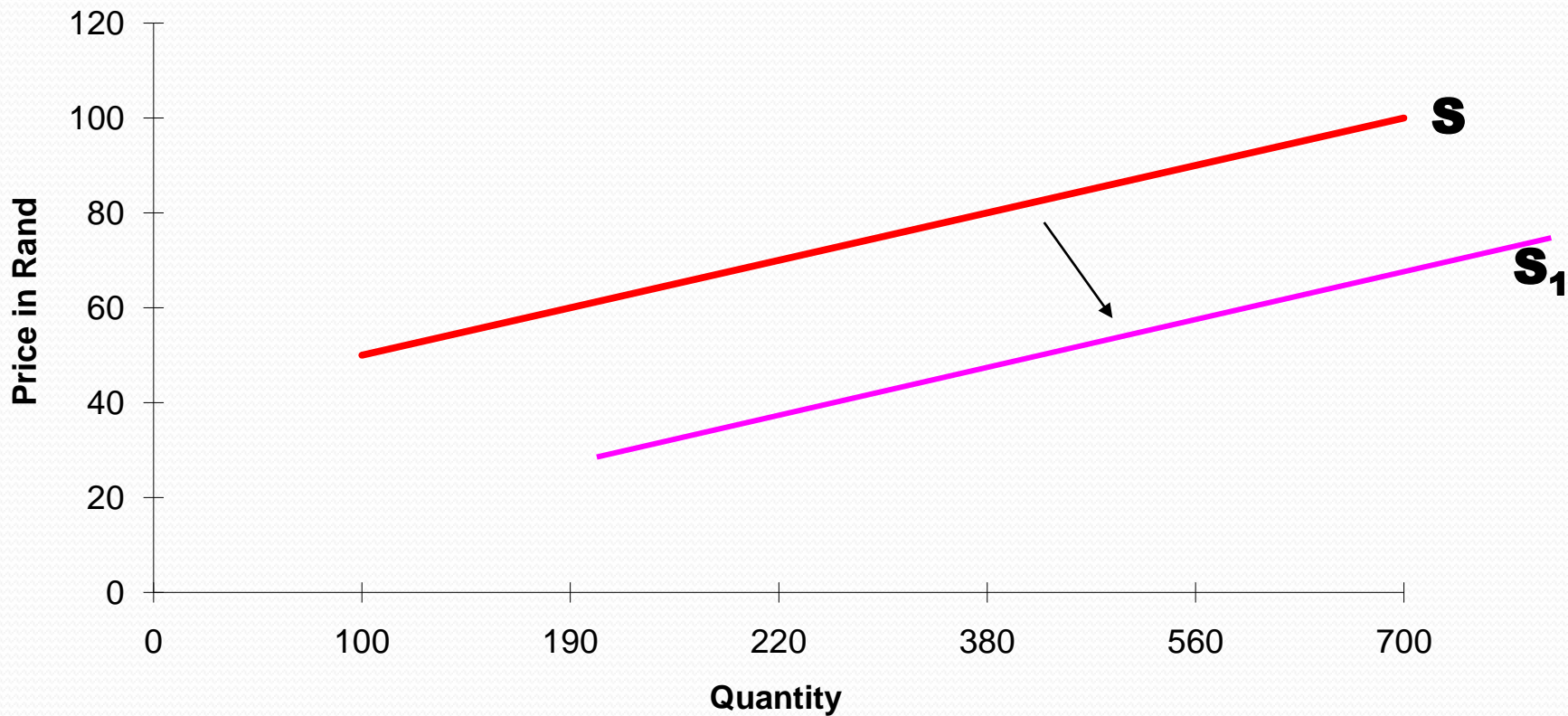
**Indicate the effect of a decrease in the demand for the product on the equilibrium price and quantity?**



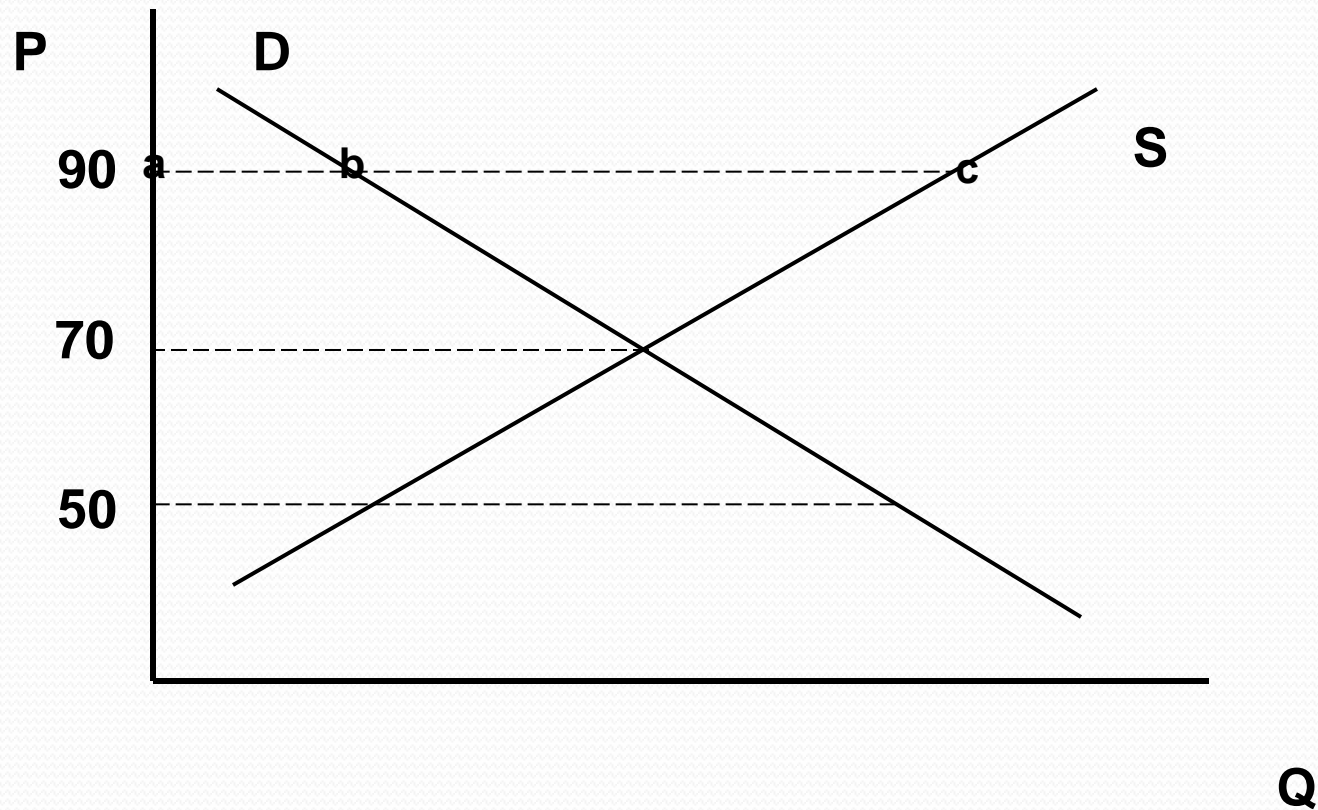
Make use of the set of axes in the diagram below to illustrate what will happen to the demand and/or supply curve of a good if the price of a complement in production increases.



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 good if the price of a complement in production increases, *ceteris paribus*.



## THE MARKET MECHANISM

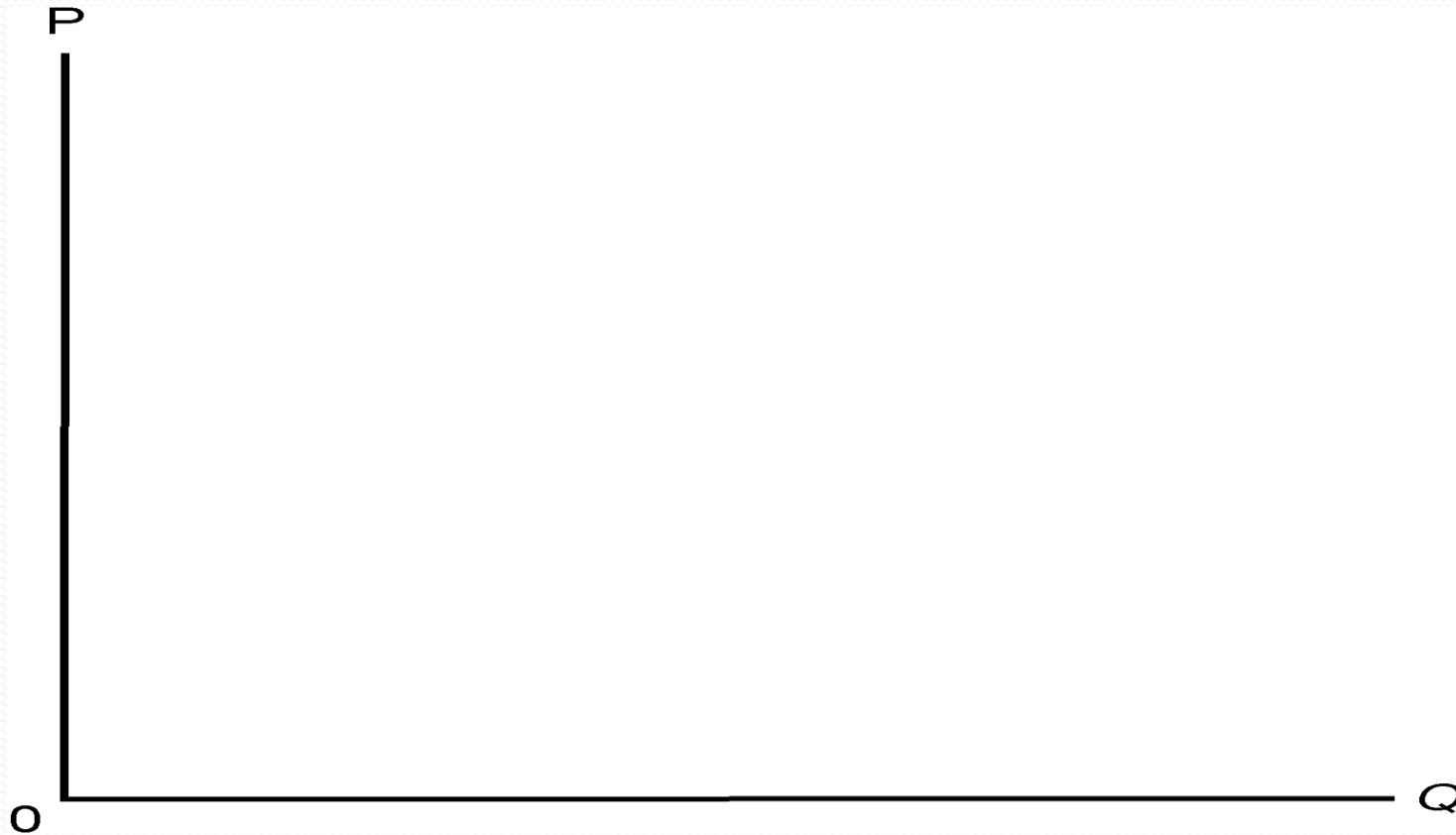


## QUESTIONS

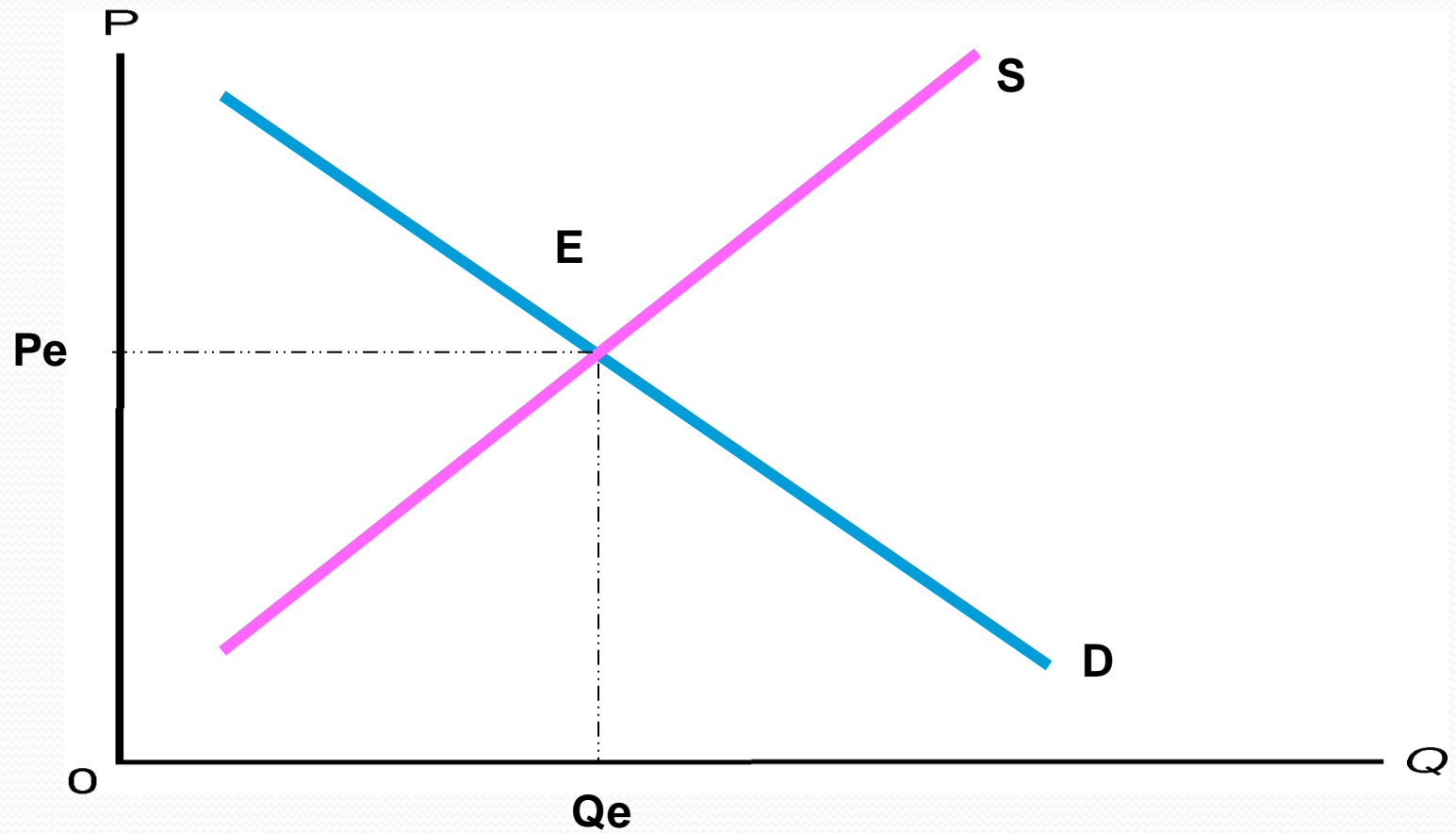
- **At which price level will the market experience excess supply?**
- **What happens at a price level of R50?**
- **If excess supply is experienced in the market, what must happen to restore equilibrium?**
- **If excess demand is experienced in the market, what must happen to restore equilibrium?**



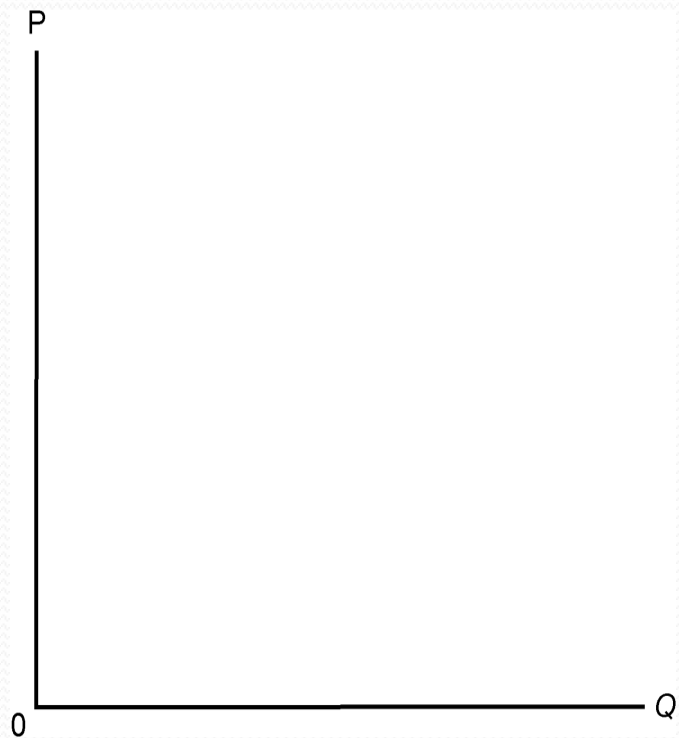
Illustrate market equilibrium and indicate the equilibrium price and quantity.



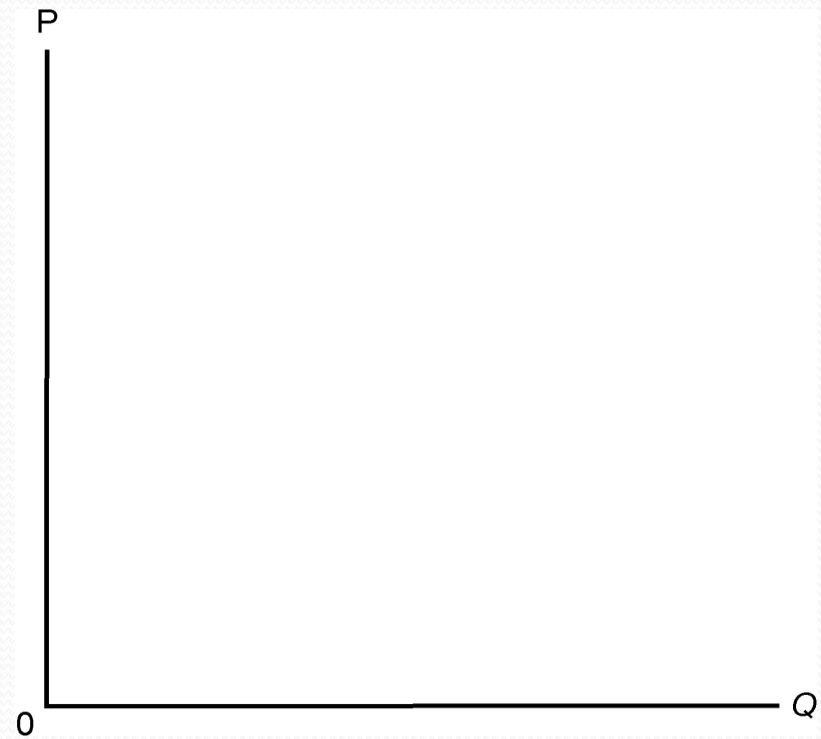
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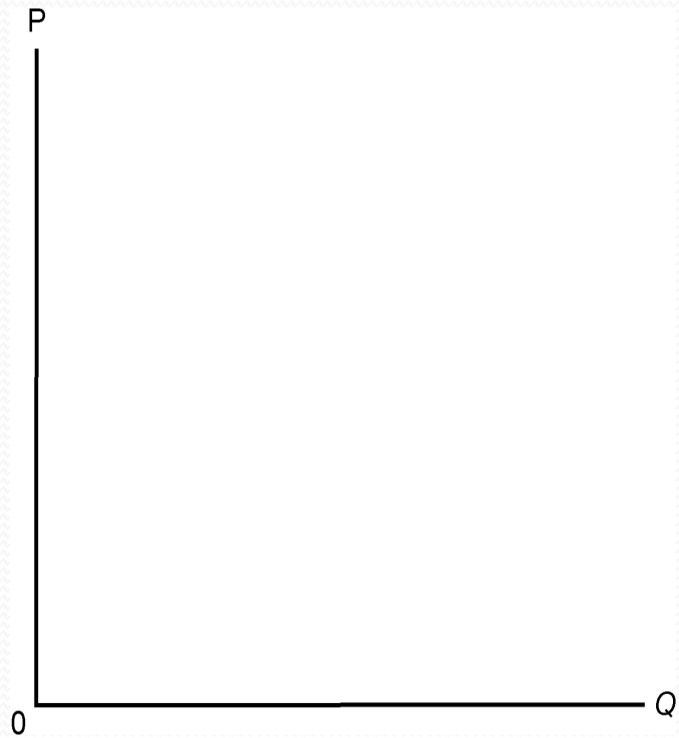
A decrease in the price of duvet covers.



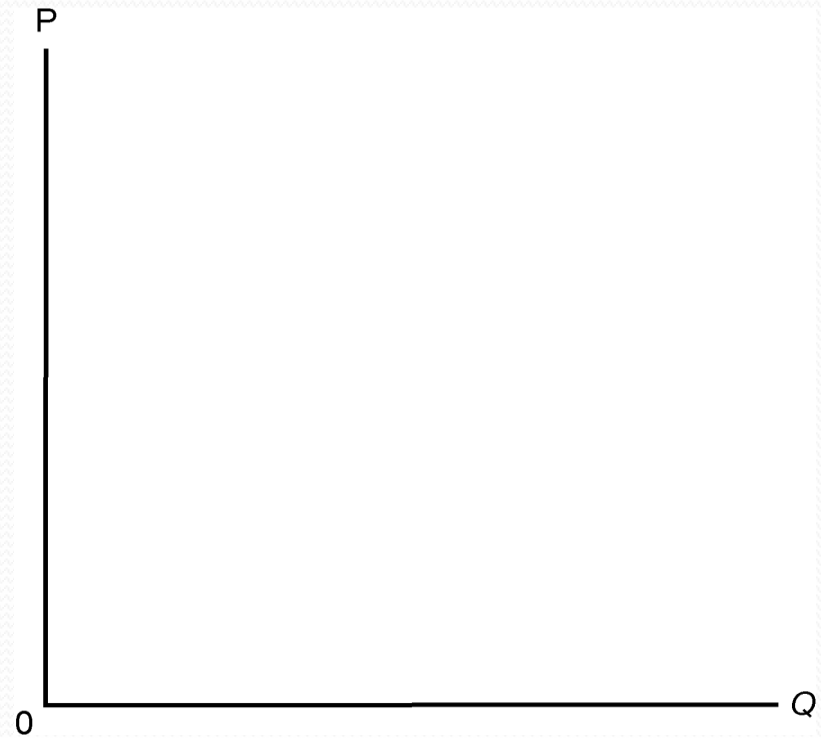
An increase in the demand for duvet inners.



An increase in the price of cotton, a substitute in consumption.



Change in the demand for linen.



## SHORTER QUESTIONS

- **If there is a successfully 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 increase:**
  - (a) The demand for domestic air travel increases
  - (b) The demand for car rentals , a complement in consumption, increases
  - (c) The demand for domestic air travel decreases
  - (d) The demand for 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:**
  - (a) The supply curve for broccoli decrease
  - (b) The supply of beans decreases
  - (c) The demand curve for broccoli increase
  - (d) The supply curve for beans increase .
- **If there is a cost saving technological breakthrough in the beer manufacturing process:**
  - (a) The supply of beer will decrease
  - (b) The demand for beer will increase
  - (c) The supply of beer will increase
  - (d) The demand for beer decrease