Market Equilibrium and Disequilibrium

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Market Equilibrium and Disequilibrium

Market: : an institution or mechanism, which brings together buyers ("demanders") and sellers ("suppliers") of particular goods and services.

REVIEW OF DEMAND AND SUPPLY

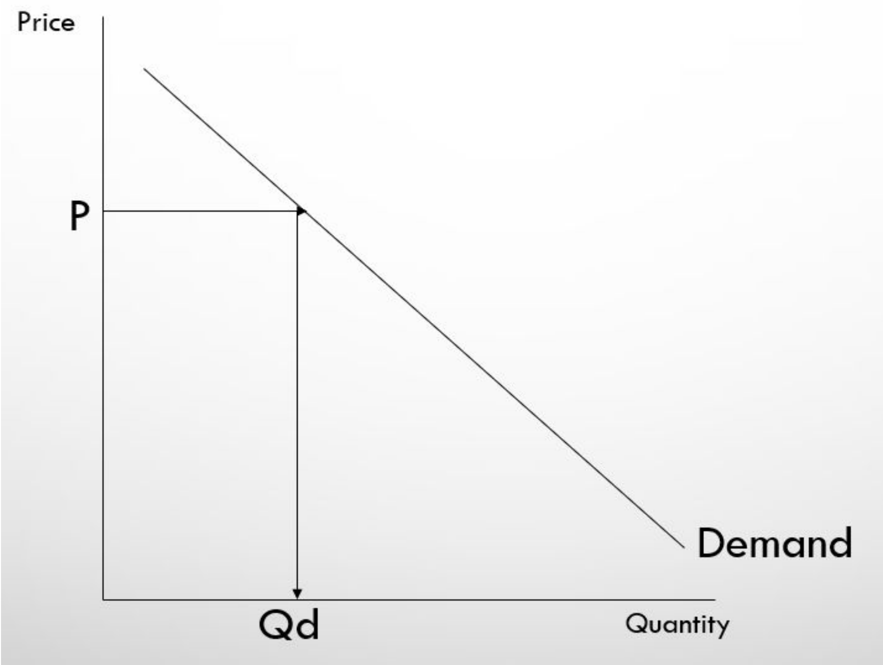
Demand- The number of units of a good or service that a buyer is willing and able to buy **at various** prices.

Quantity Demanded- The number of units of a good or service that a buyer is willing and able to buy at **a specific** prices.

Demand vs Quantity Demanded

Demand is the entire Curve

Quantity Demanded comes from a point on the curve



Demand Schedule

Price (P)	Quantity (Q water bottles)
$5	0
$3	1
$2	7
$1	24
$.50	40
$.05	82

The law of demand: a change in the own-price causes a change in quantity demanded in the opposite direction and movement along a demand (marginal benefit) curve.

MARKET DEMAND CURVES

Market Demand Curves come from the summation of individual demand curves.

DETERMINANTS OF DEMAND

1. CONSUMER INCOMES
2. TASTE AND PREFERENCE
3. PRICE OF A COMPLEMENT
4. PRICE OF A SUBSTITUTE
5. CHANGE IN POPULATION
6. EXPECTATIONS ABOUT PRICE

SUPPLY

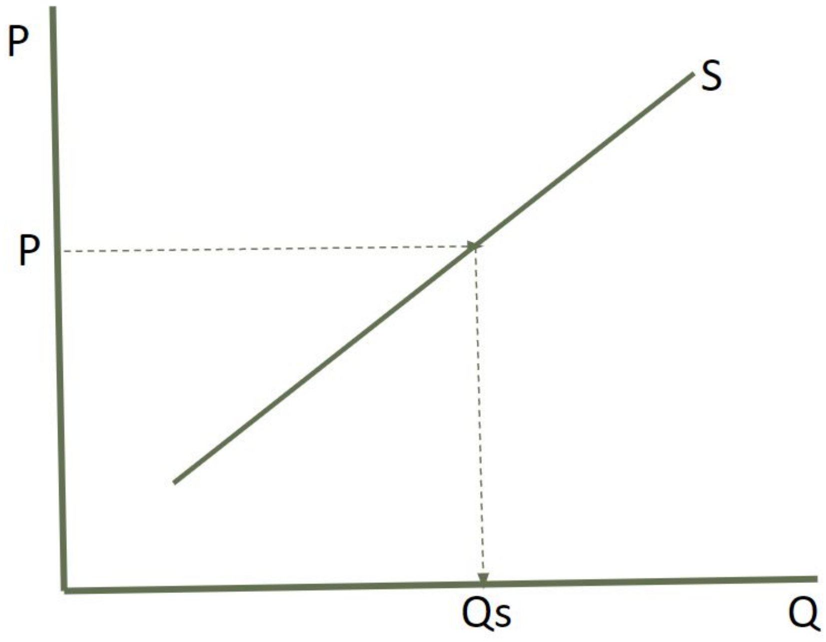
Supply- The number of units of a good or service that a seller is willing and able to sell **at various** prices.

Quantity Supplied- The number of units of a good or service that a seller is willing and able to sell at **a specific** price.

Supply vs Quantity Supplied

Supply is the entire Curve

Quantity Supplied comes from a point on the curve



SUPPLY SCHEDULE

Price (P)	Quantity (Q water bottles)
$5	120
$3	96
$2	48
$1	24
$.50	12
$.05	0

The law of supply: a change in the own-price causes a change in quantity supplied in the same direction and movement along a supply curve.

MARKET SUPPLY CURVES

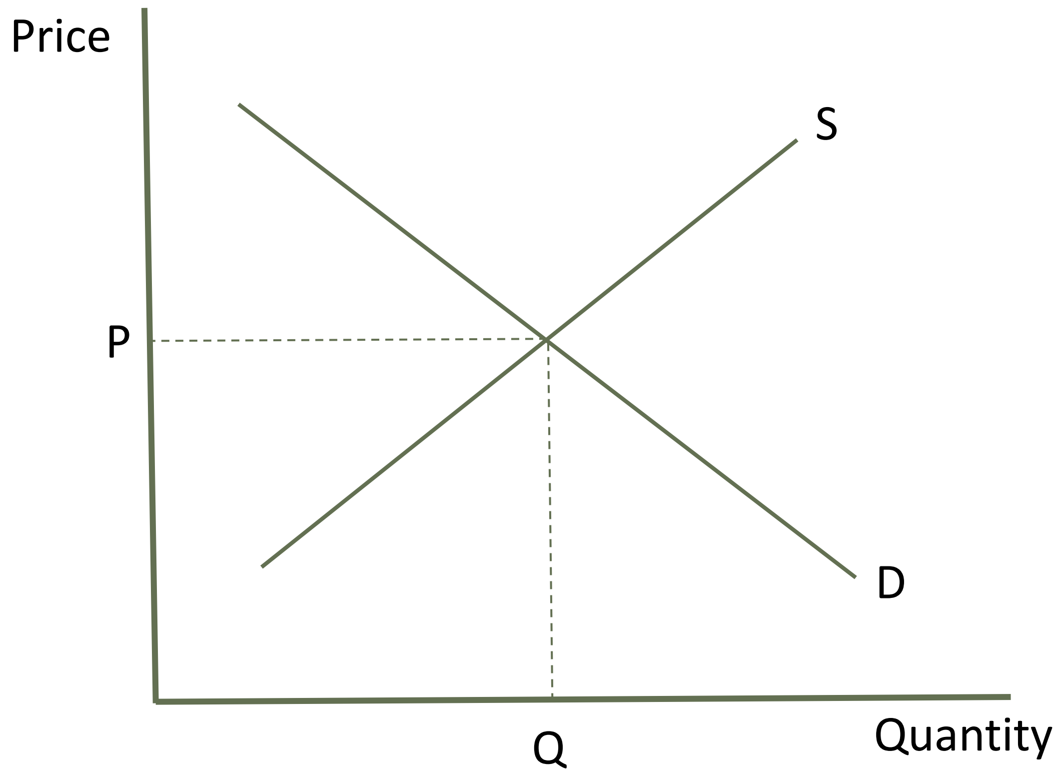
Market Supply Curves come from the summation of individual supply curves.

DETERMINANTS OF SUPPLY

1. Resource Prices
2. Technology
3. Taxes
4. Subsidies
5. Number of Sellers
6. Expectations about future price

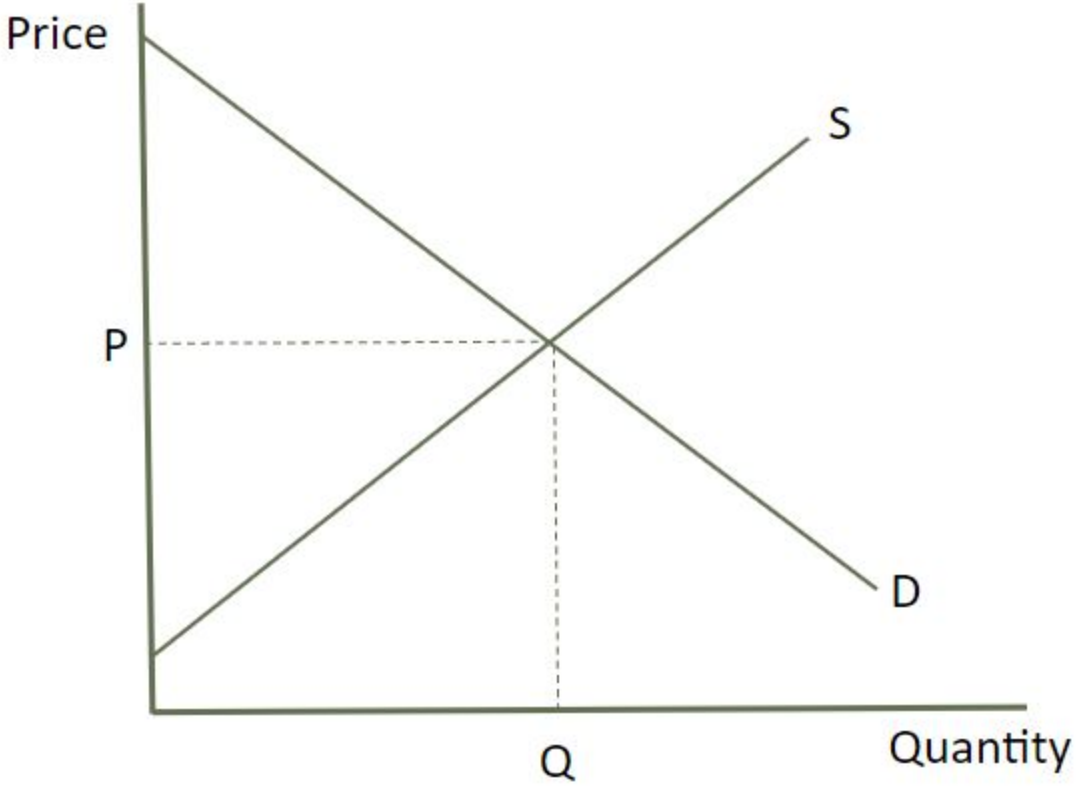
Equilibrium

The price at which the quantity demanded equals the quantity supplied is called the equilibrium price.



Equilibrium

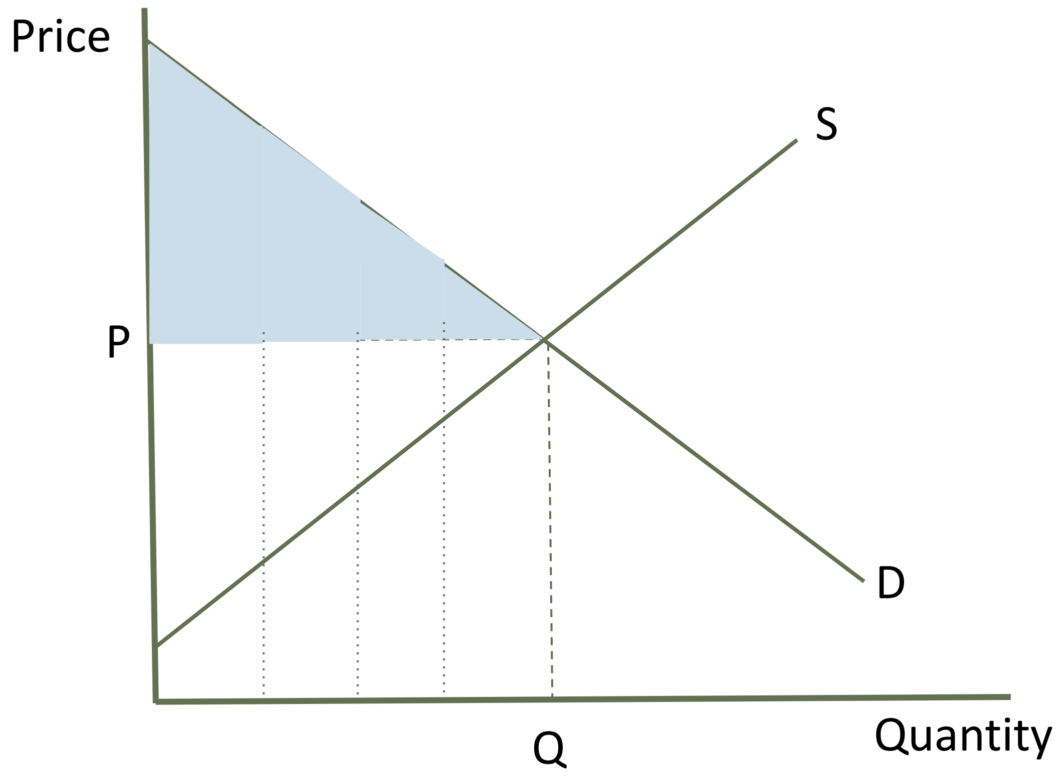
EK: In a perfectly competitive market, equilibrium is achieved (and markets clear with no shortages or surpluses) when the price of a good or service brings the quantity supplied and quantity demanded into balance, in the sense that buyers wish to purchase the same quantity that sellers wish to provide.



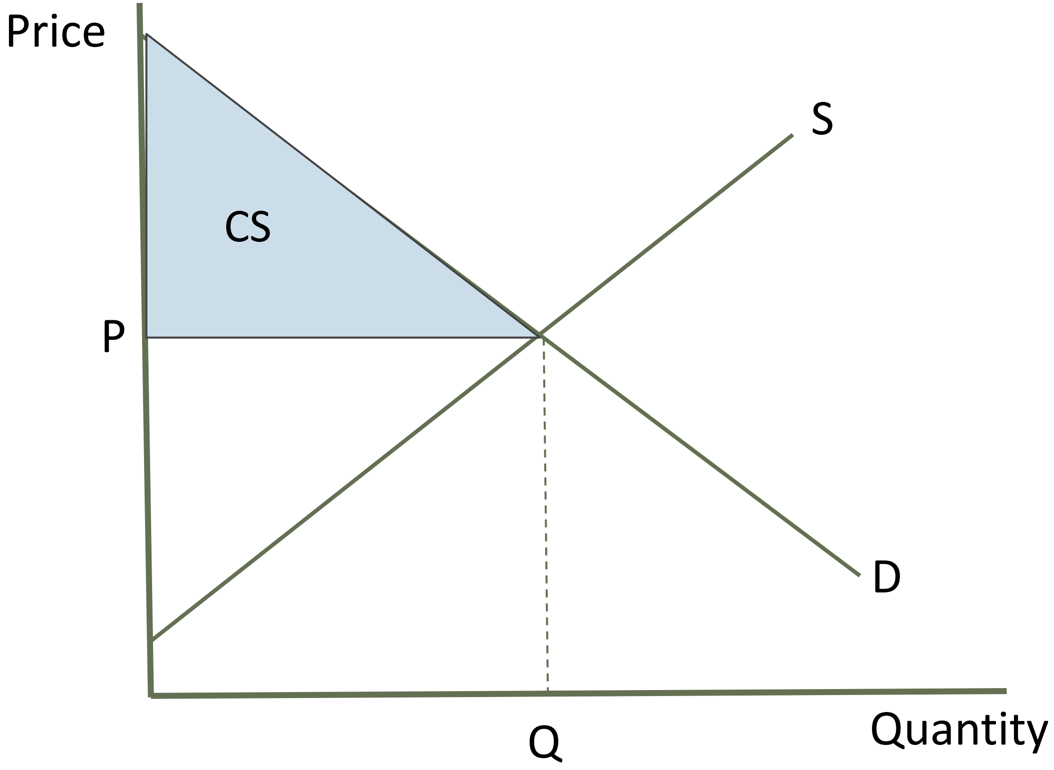
Consumer Surplus

CS is the difference between the price the consumer is willing to pay for a good and the price they have to pay for the good.

Consumer Surplus



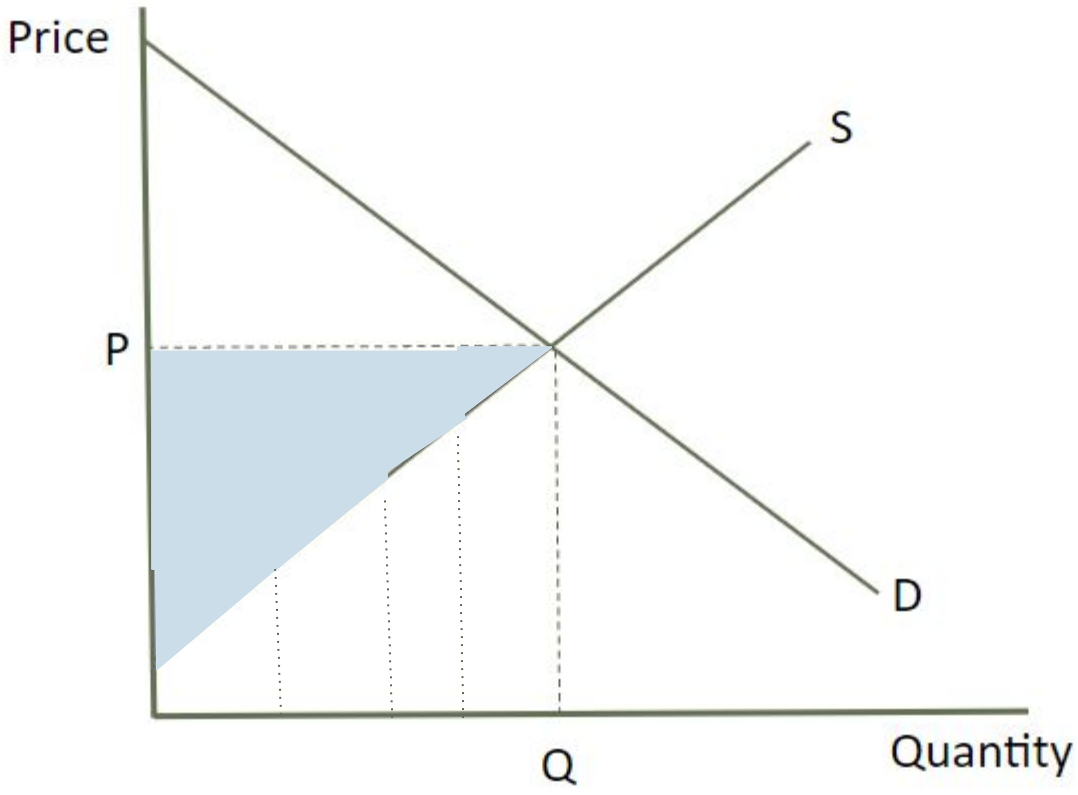
Consumer Surplus



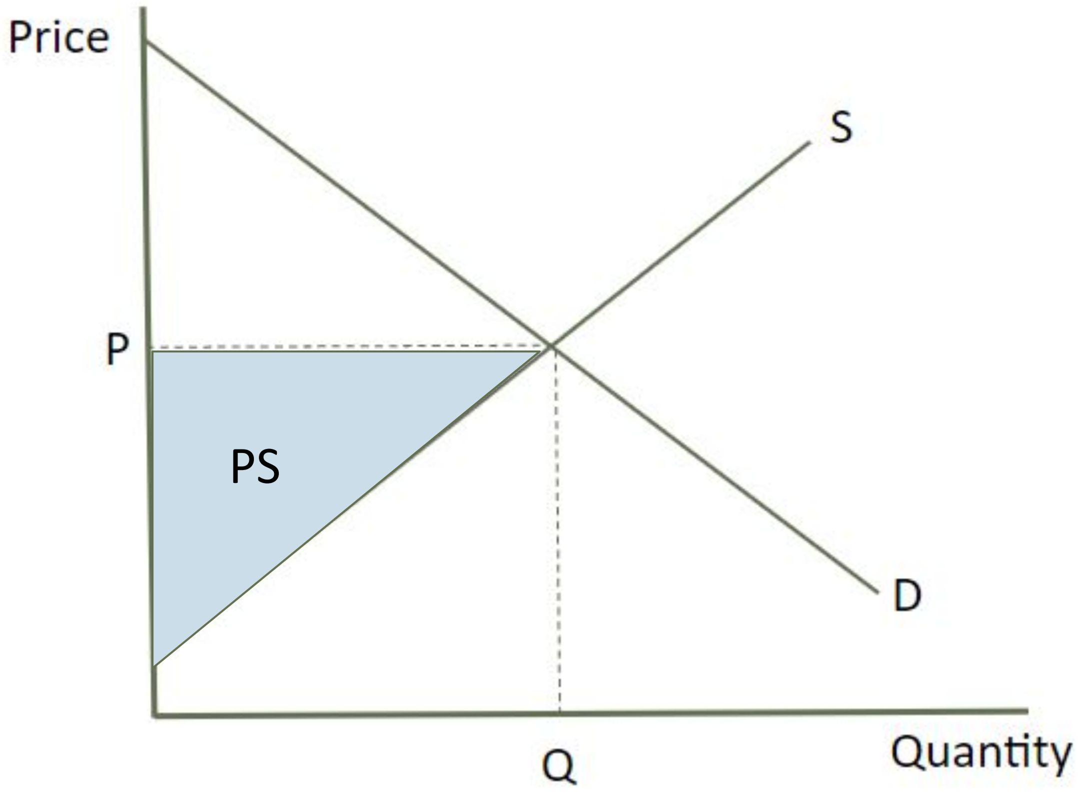
Producer Surplus

PS is the difference between the price the seller is willing to sell a good for and the price they receive for the good.

Producer Surplus

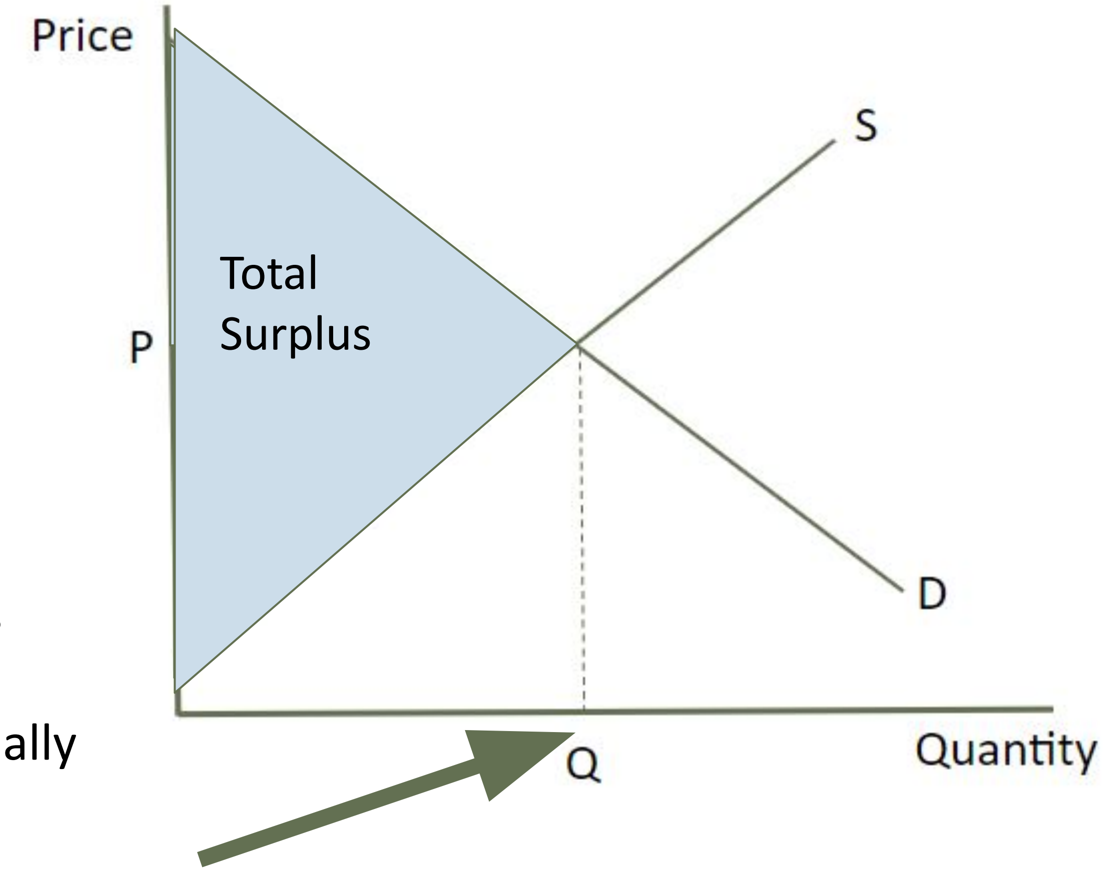


Producer Surplus



Equilibrium

Total Surplus is CS + PS.



When total surplus is maximized, we are producing at the Socially Optimal Output

Equilibrium

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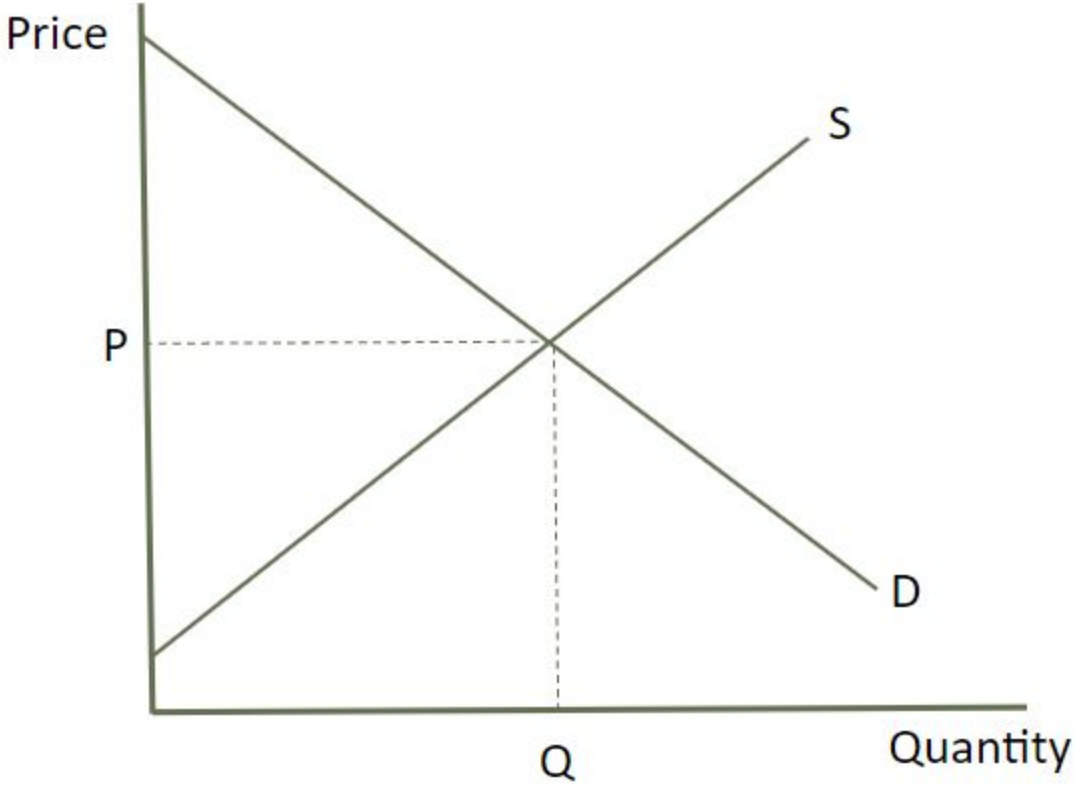
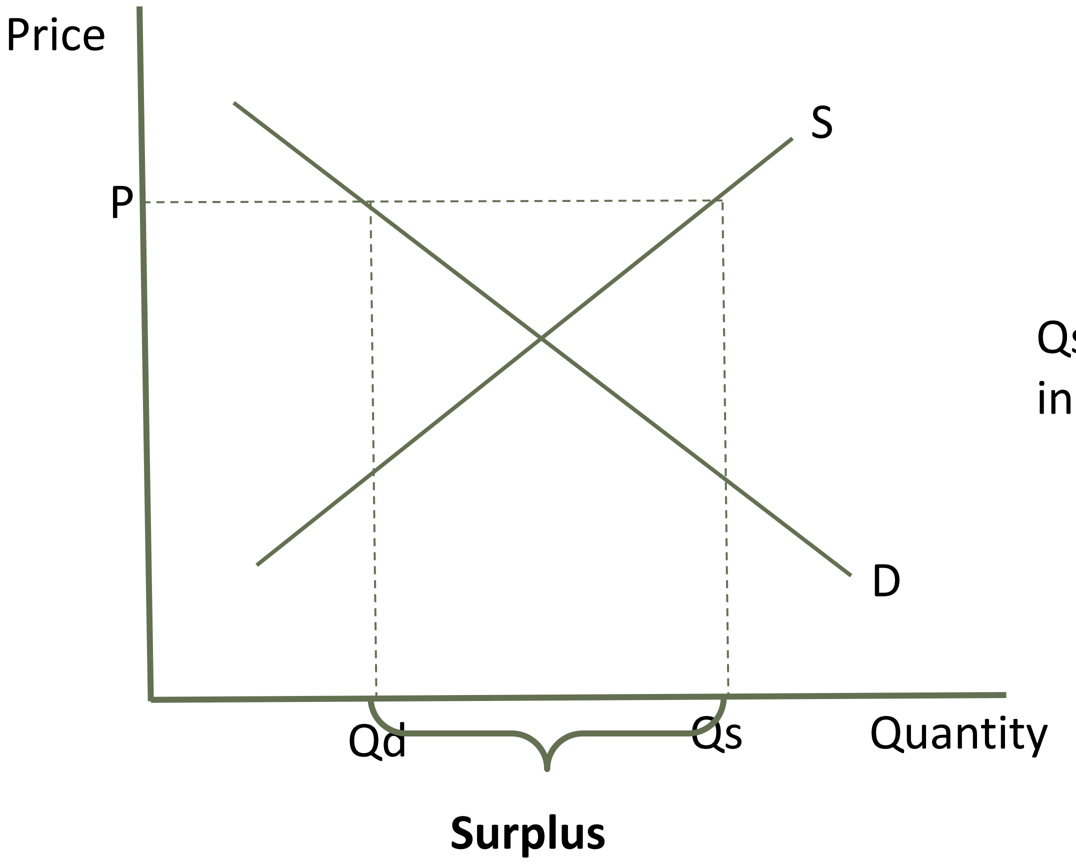


Disequilibrium

EK: Whenever markets experience imbalances- creating disequilibrium prices and quantities, surpluses, and shortages- market forces drive price and quantity toward equilibrium.

Disequilibrium (Surplus)

What happens if the price in the market is above equilibrium?

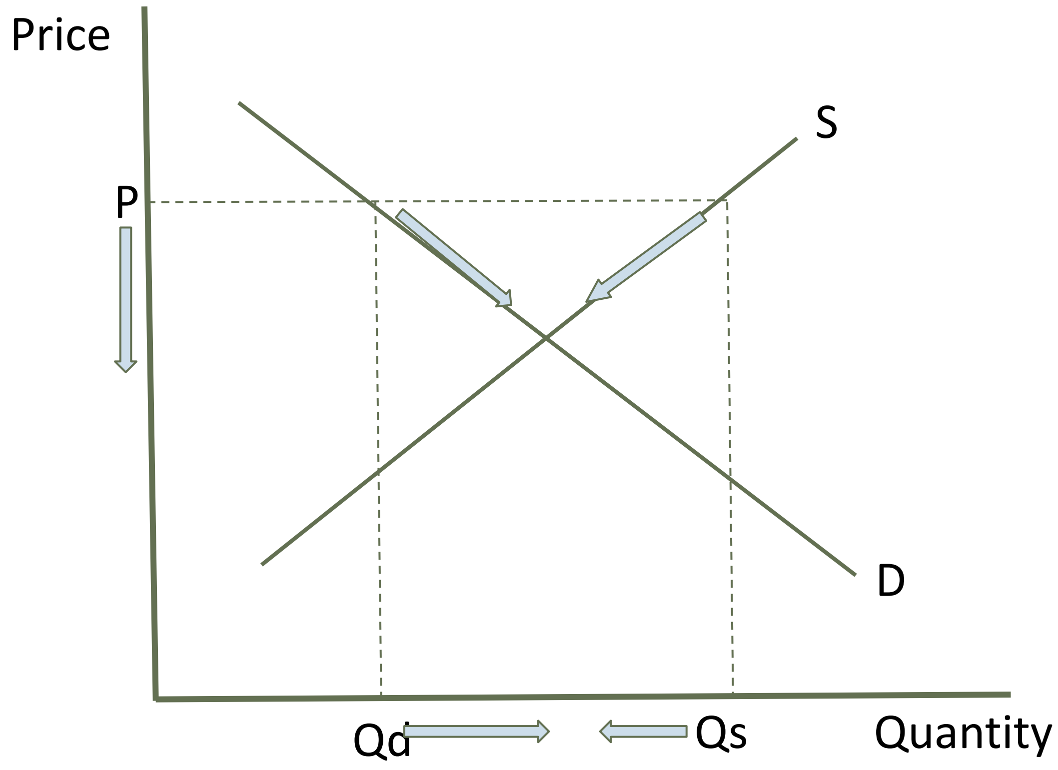


Qs > Qd so we have a surplus in the market.

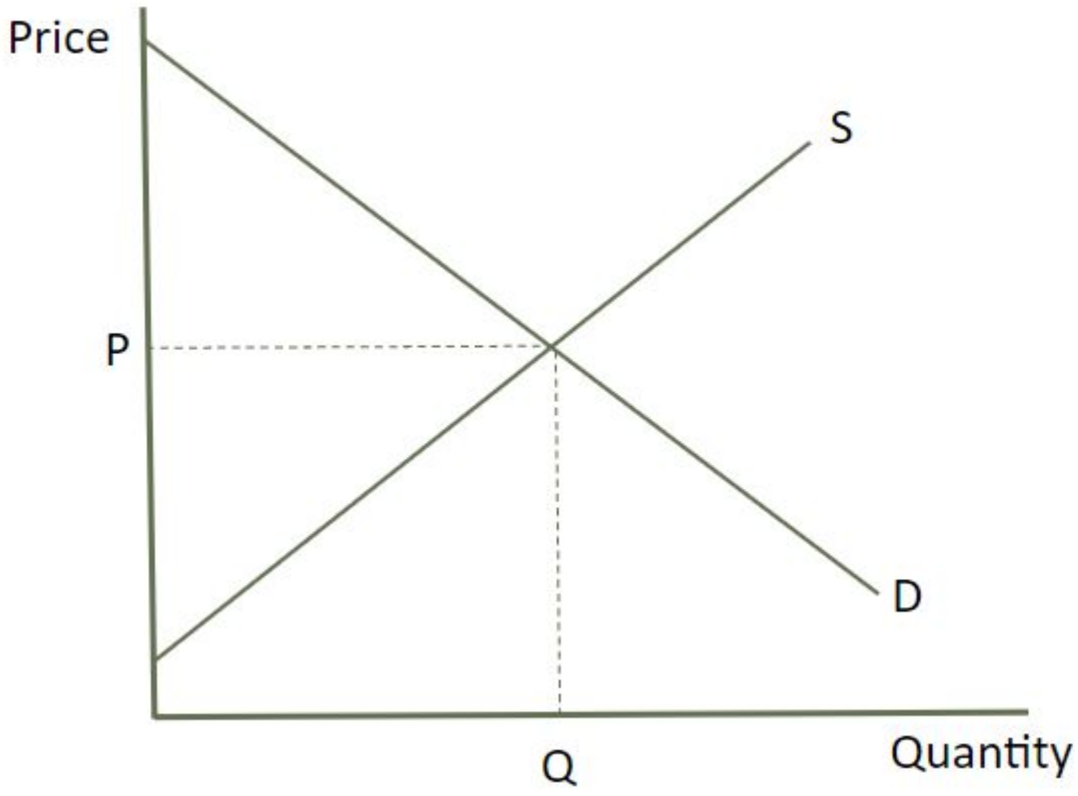
Qs - Qd = Surplus

Disequilibrium

When markets are out of equilibrium, they adjust. In this case the price will decrease and the market will move towards equilibrium.

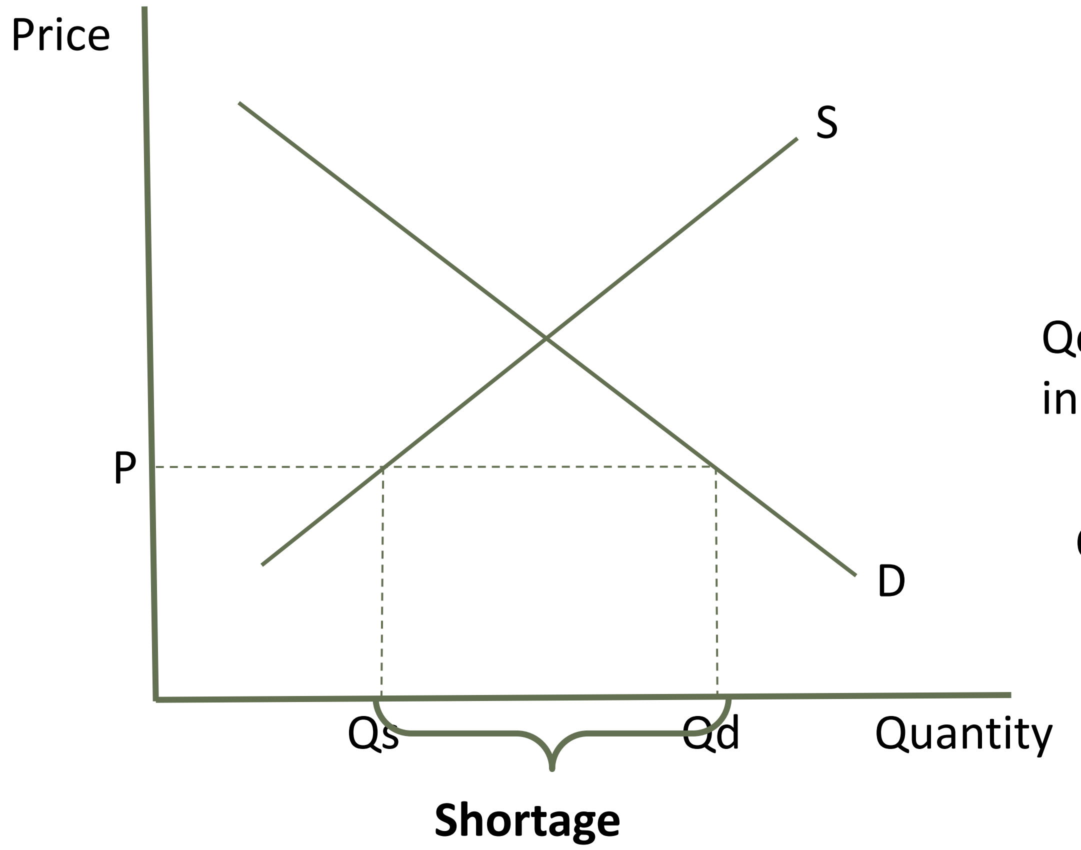


Equilibrium



Disequilibrium (Shortage)

What happens if the price in the market is below equilibrium?

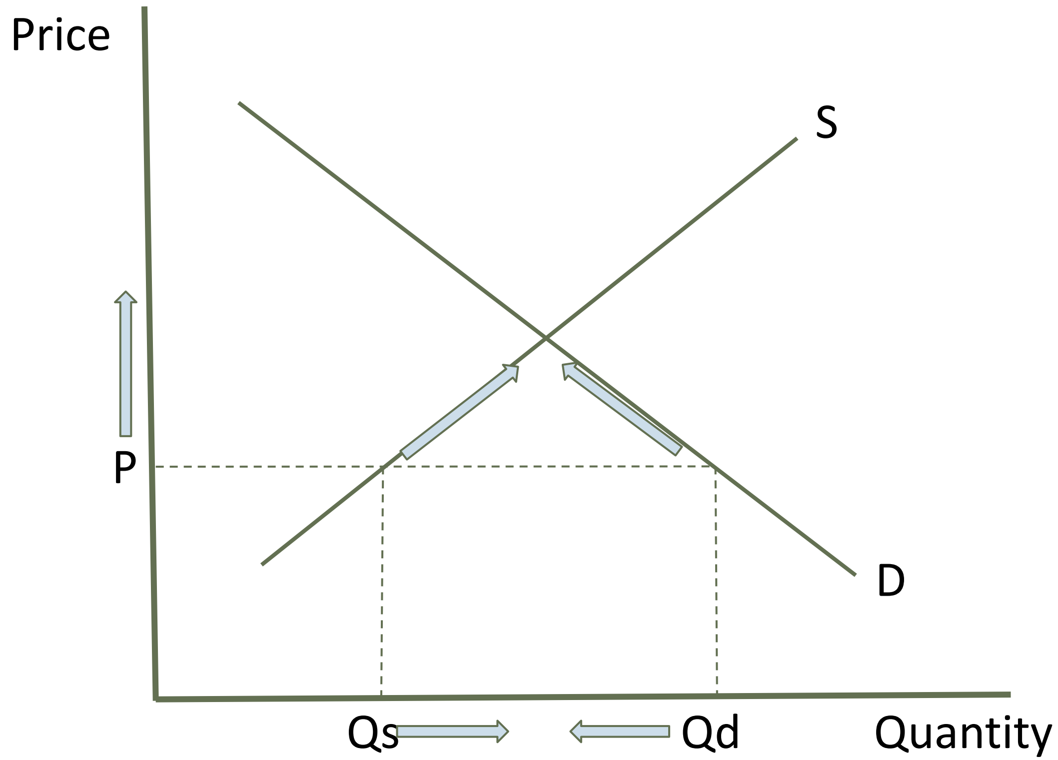


Qd > Qs so we have a shortage in the market.

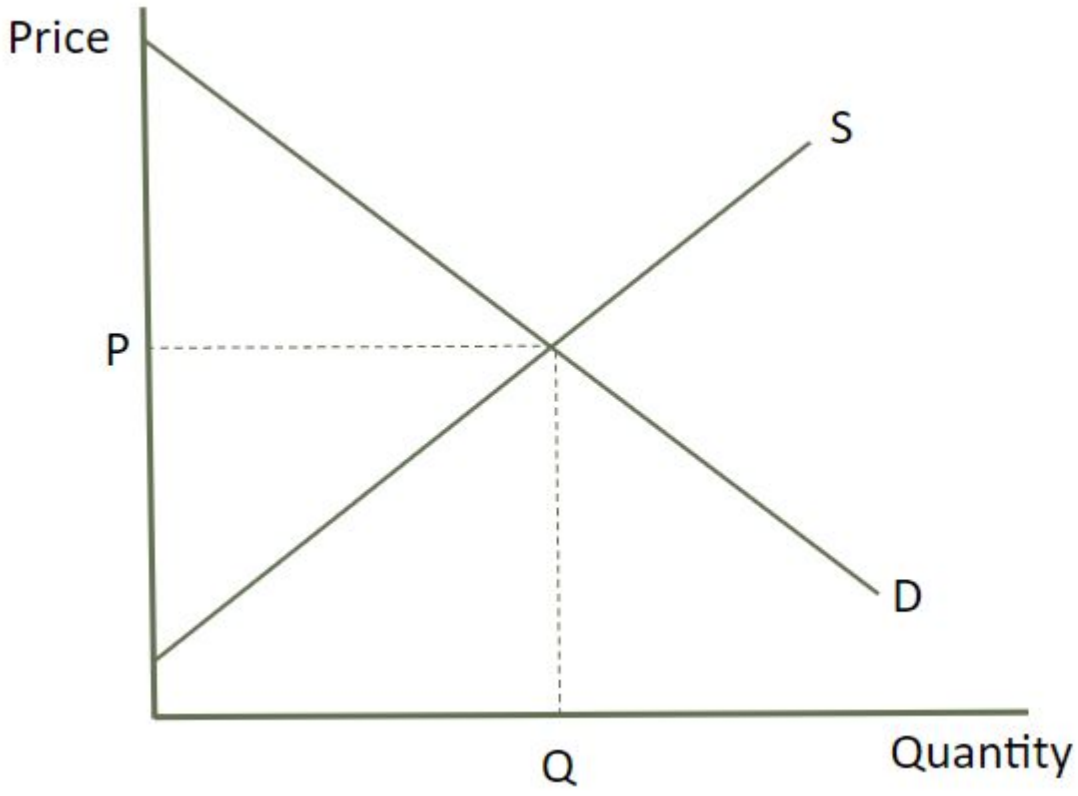
Qd - Qs = Shortage

Disequilibrium (Shortage)

When markets are out of equilibrium, they adjust. In this case the price will increase and the market will move towards equilibrium.



Equilibrium



Market Disequilibrium

EK: Factors that shift the market demand and market supply curves cause price, quantity, consumer surplus, producer surplus, and total economic surplus (within that market) to change. The impact of the change depends on the price elasticities of demand and supply.

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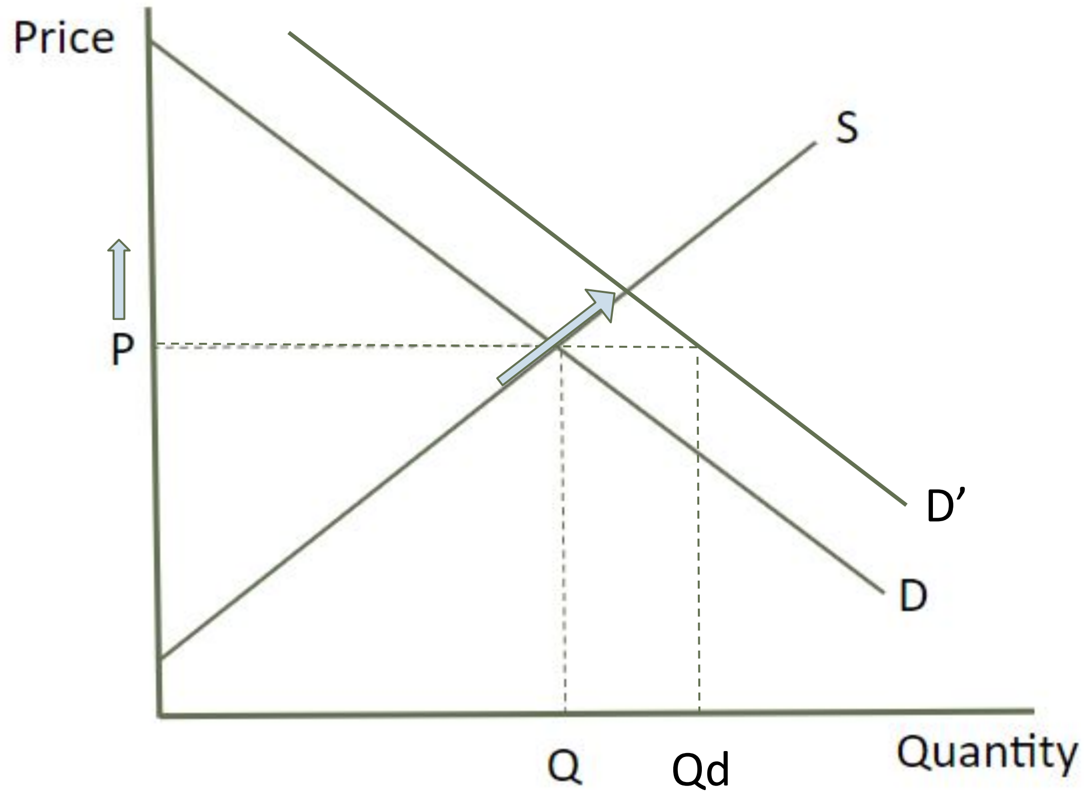
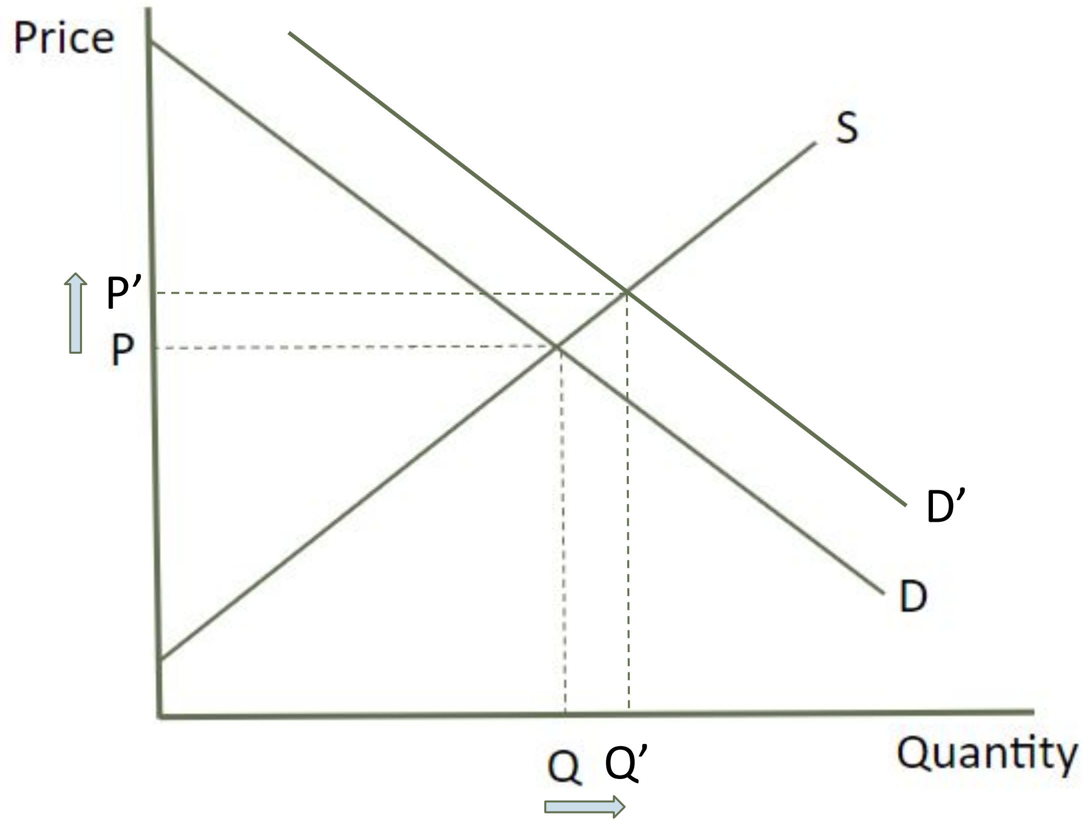
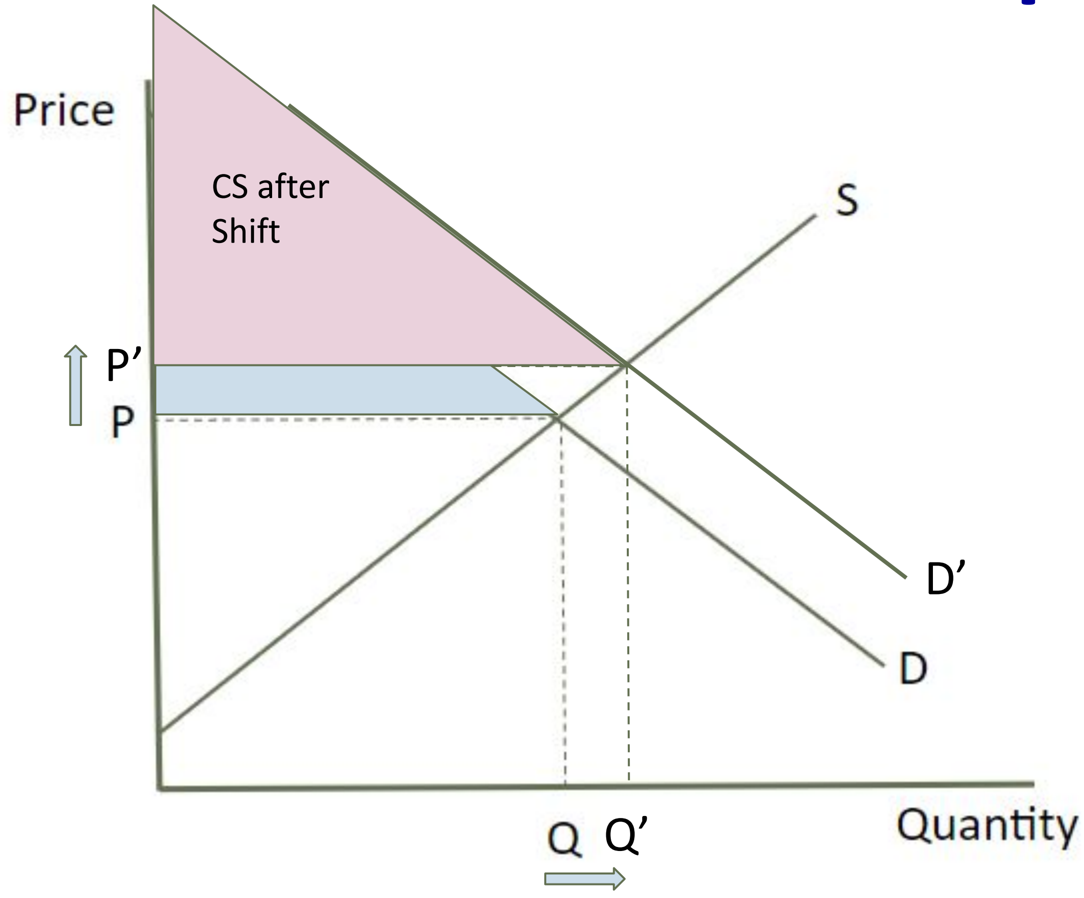
Increase in Demand



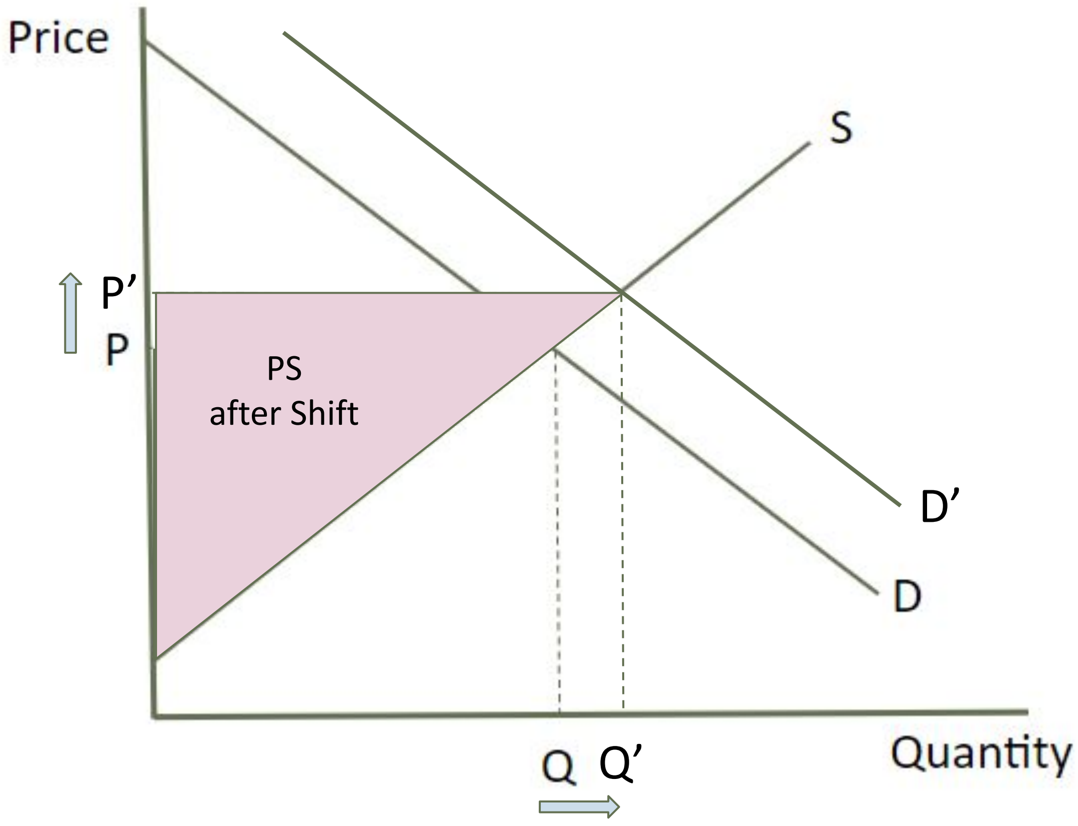
Increase in Demand



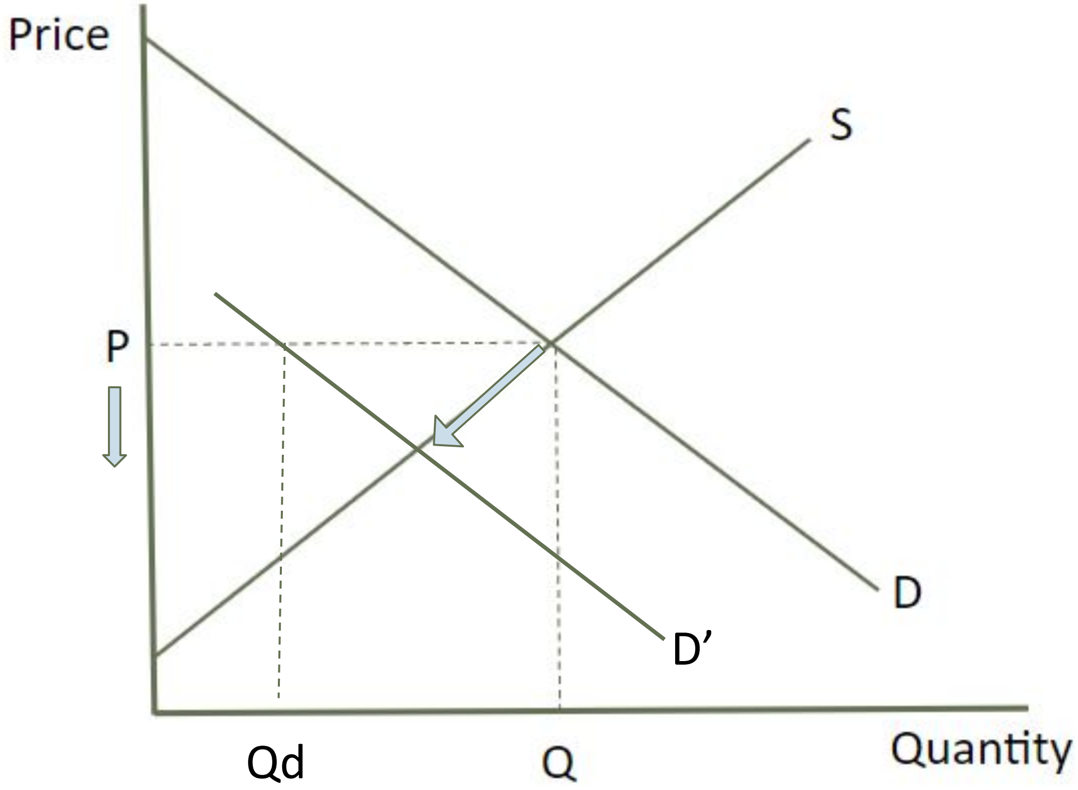
Increase in Demand
Consumer and Producer Surplus



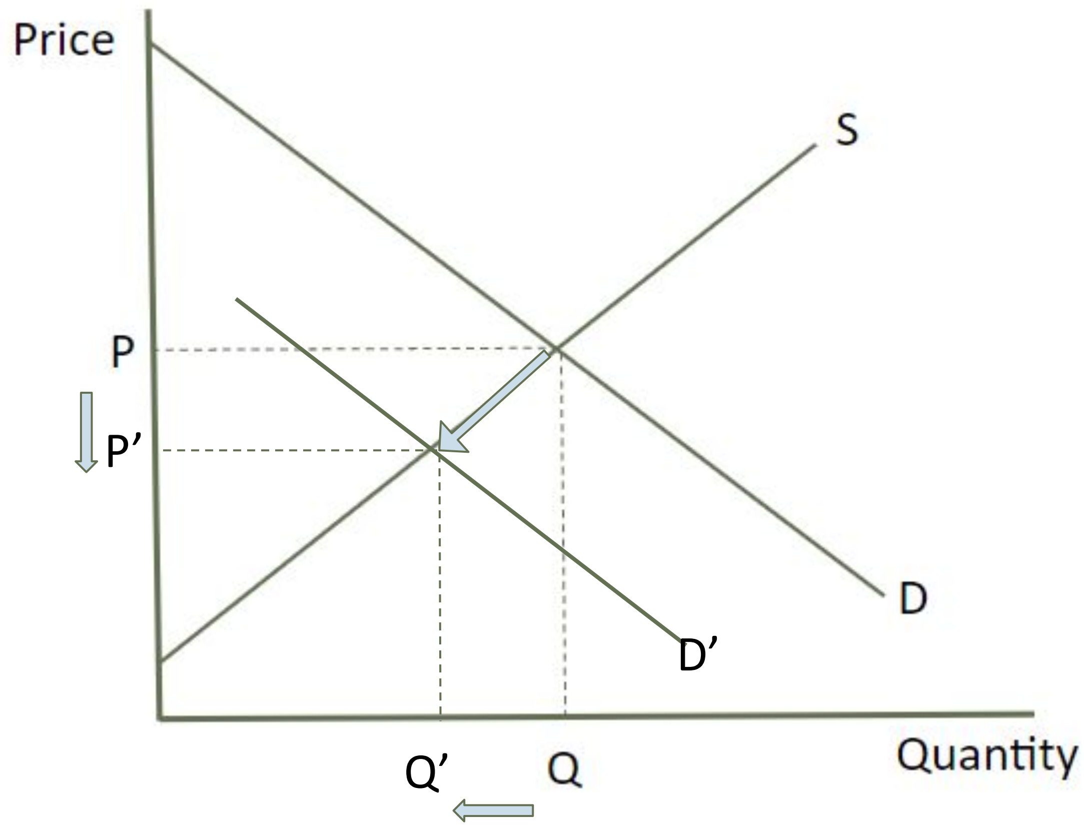
Increase in Demand
Consumer and Producer Surplus



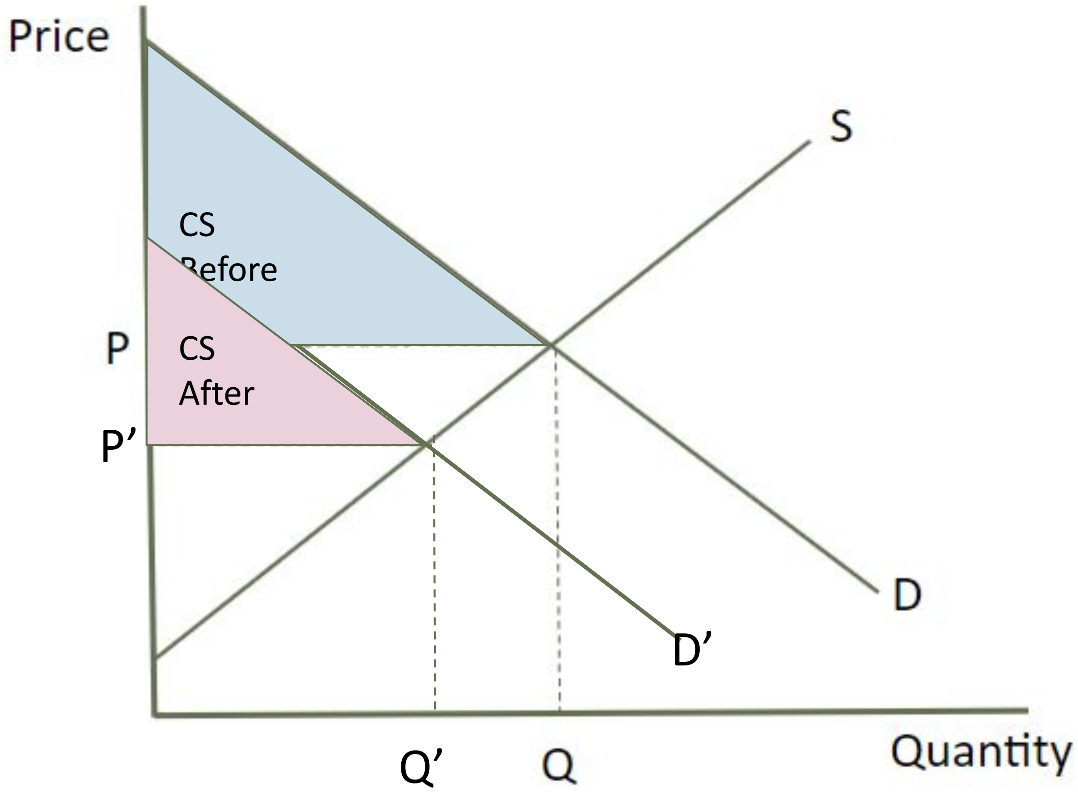
Decrease in Demand



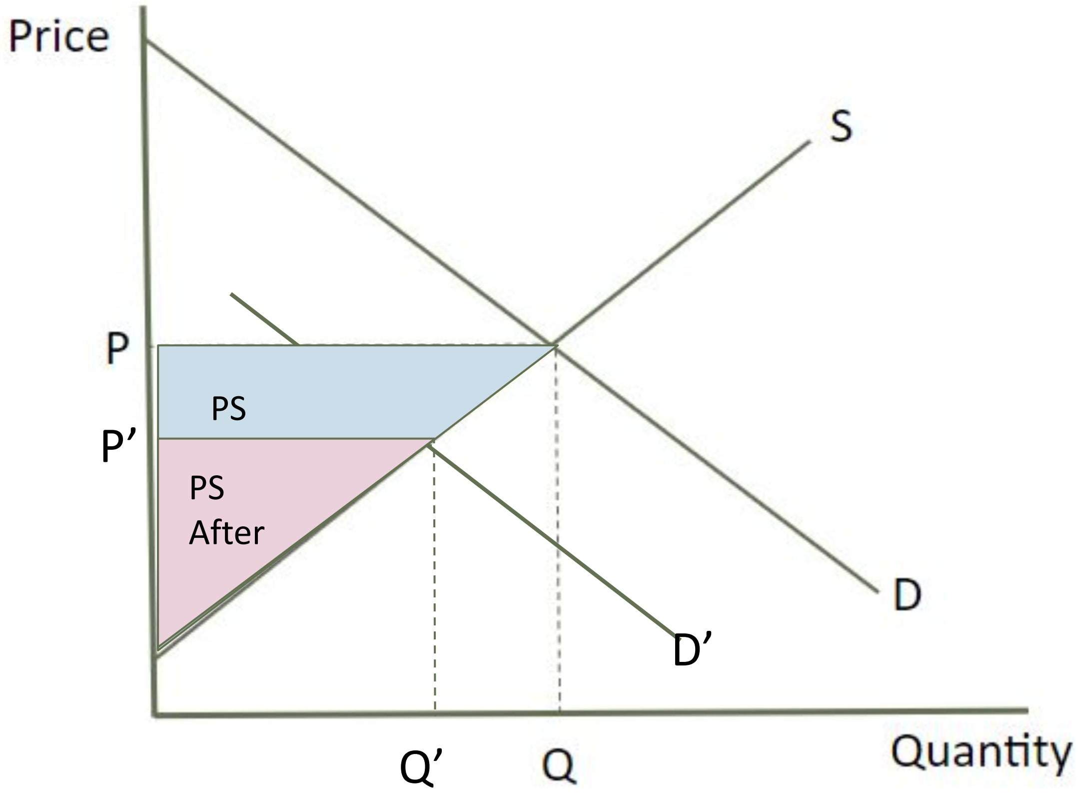
Decrease in Demand



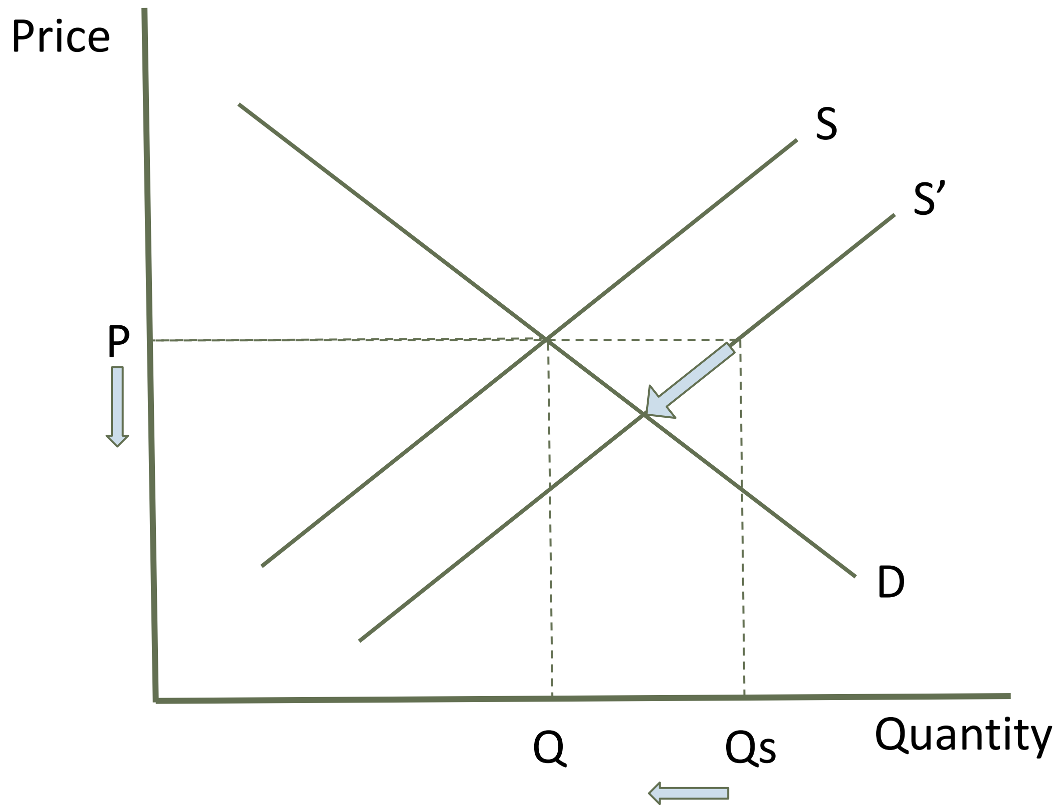
Decrease in Demand
CS and PS



Decrease in Demand
CS and PS



Increase in Supply



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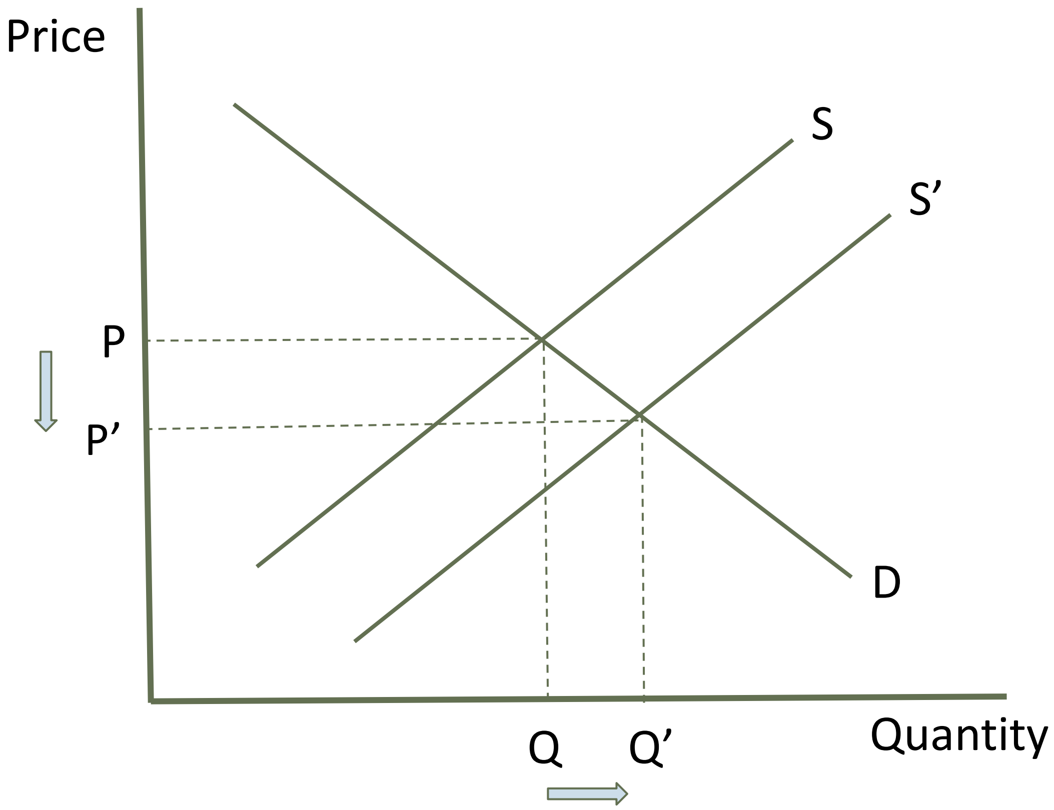
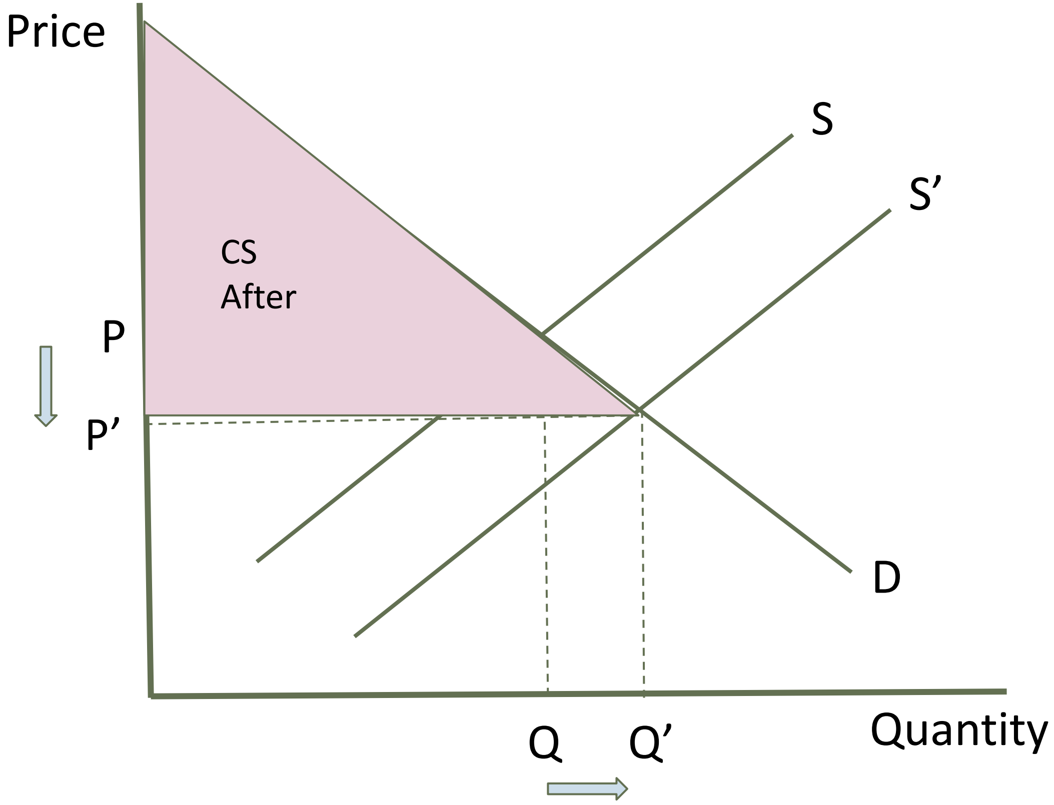
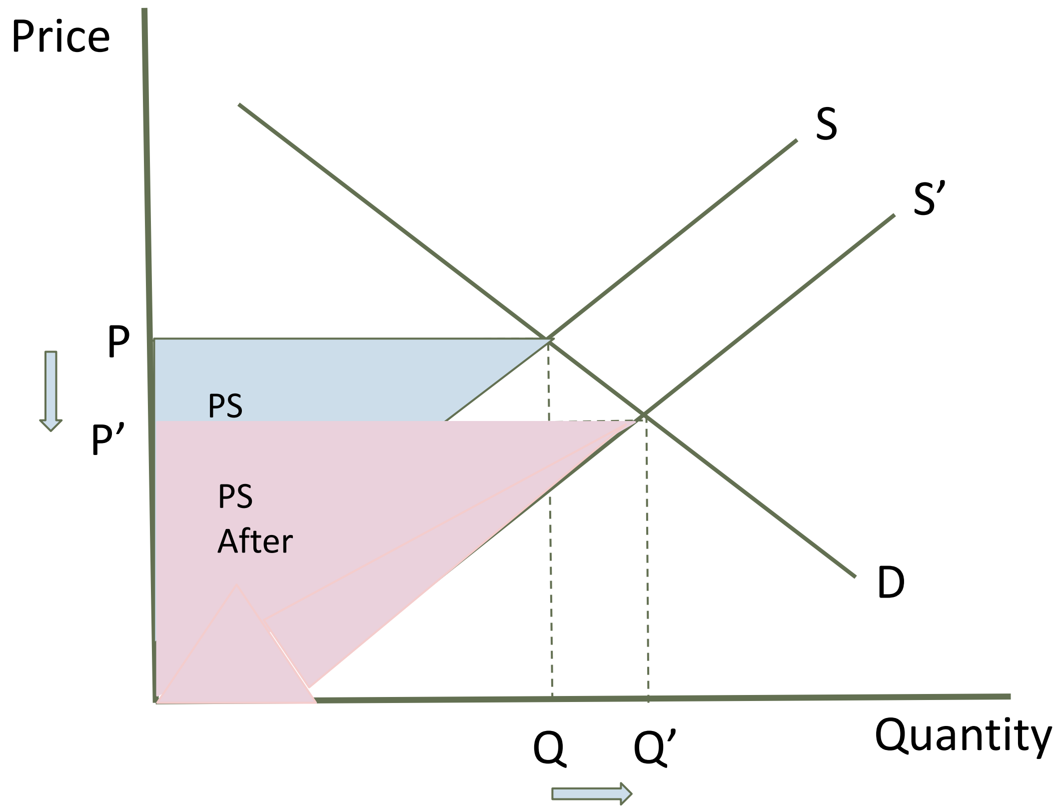


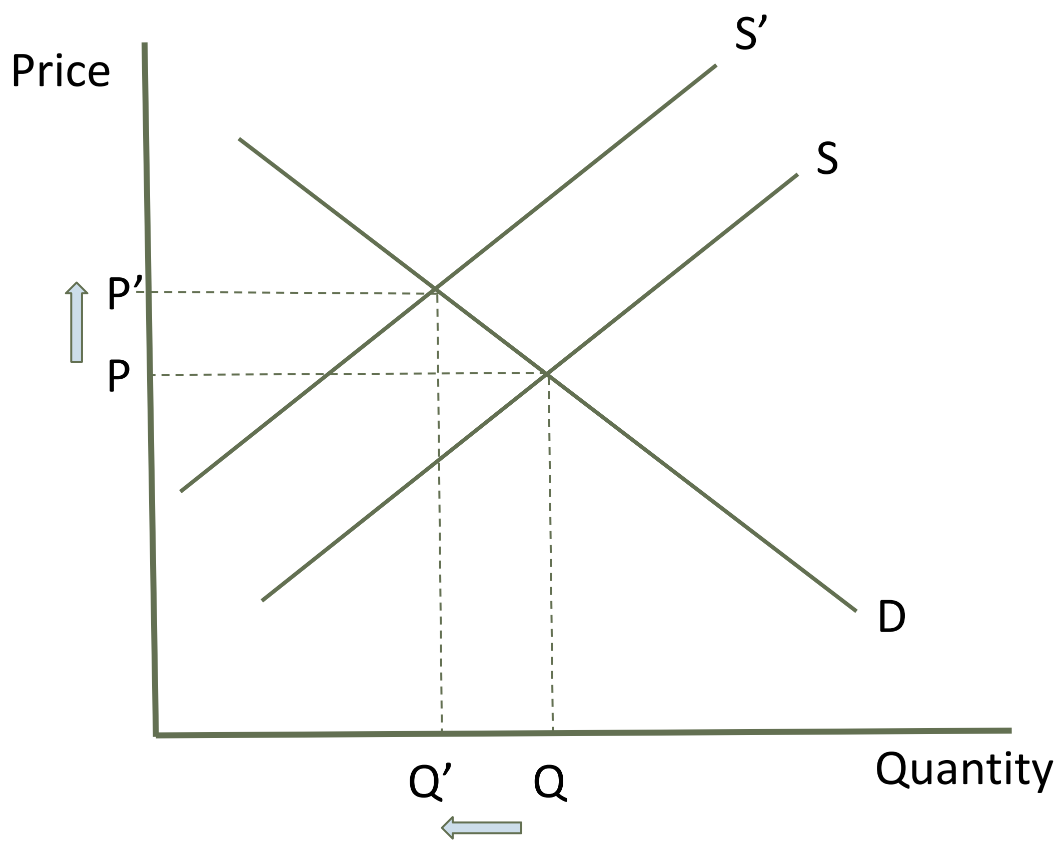
Increase in Supply
CS and PS



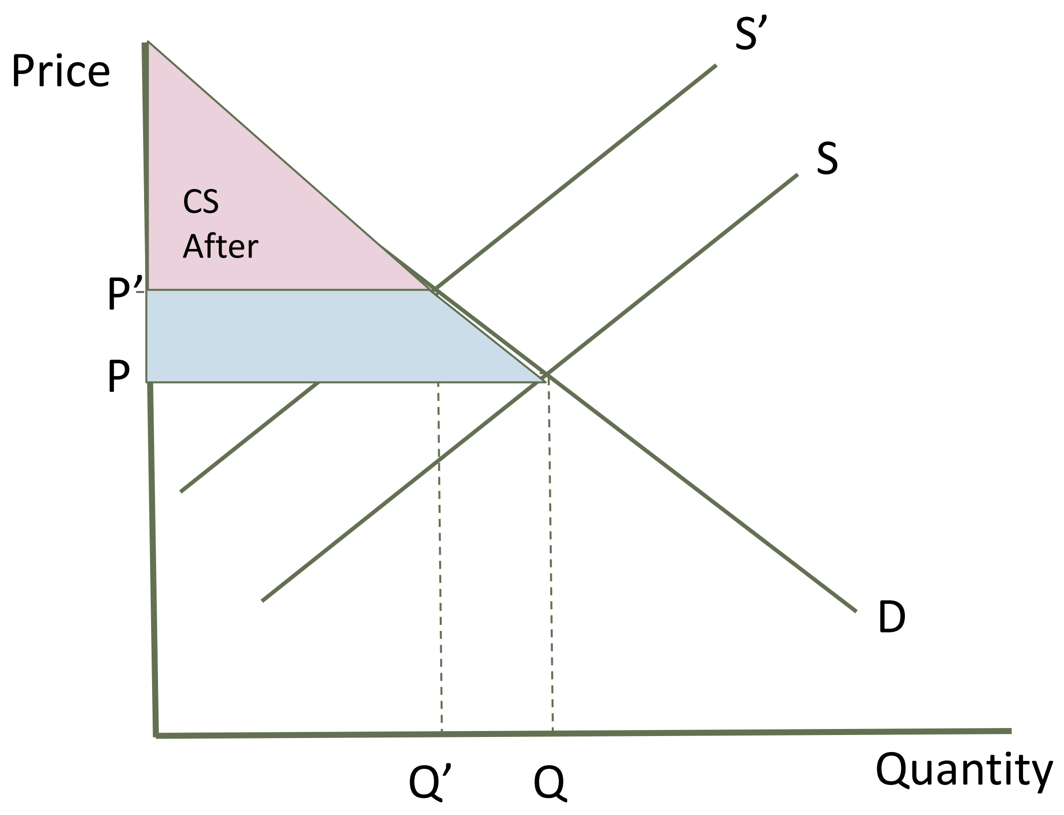
Increase in Supply
CS and PS



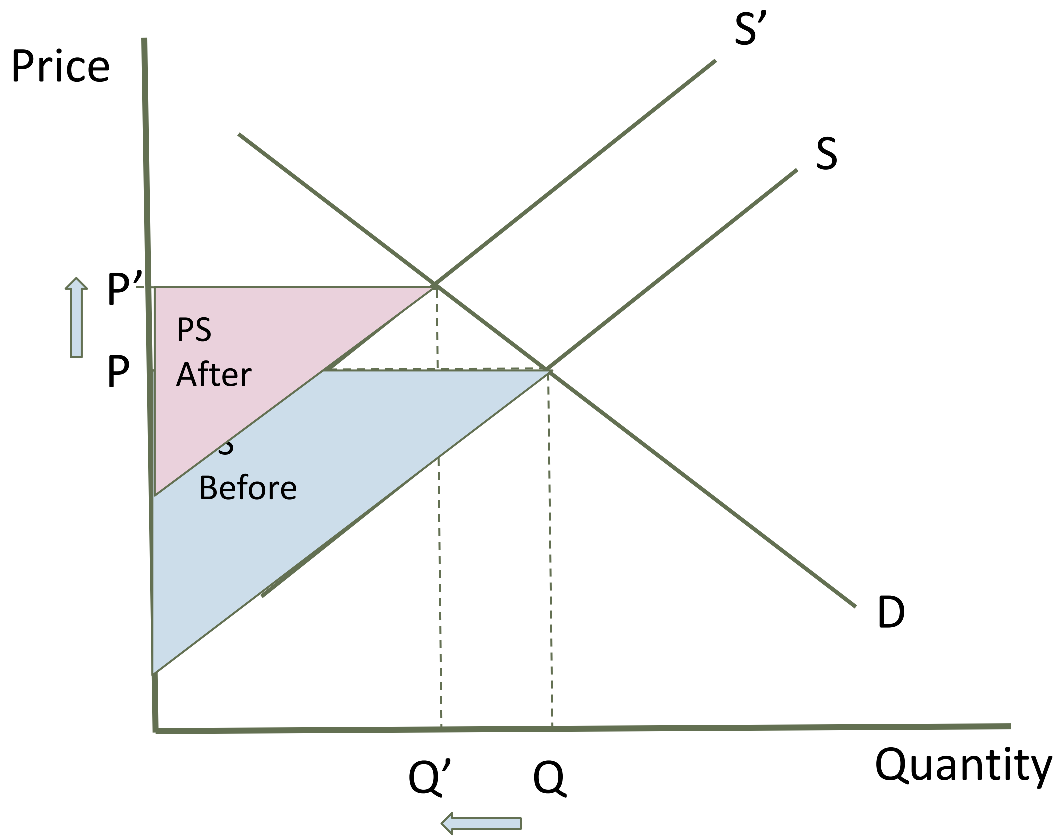
Decrease in Supply



Decrease in Supply



Decrease in Supply
CS and PS



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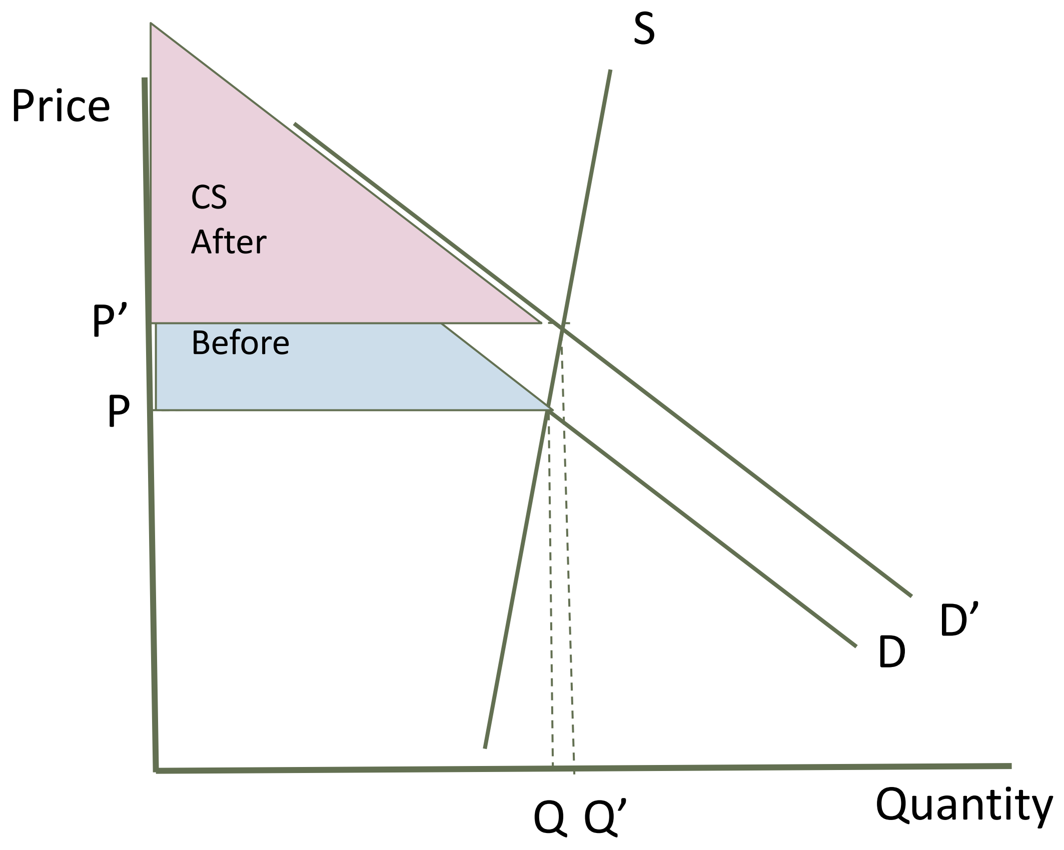
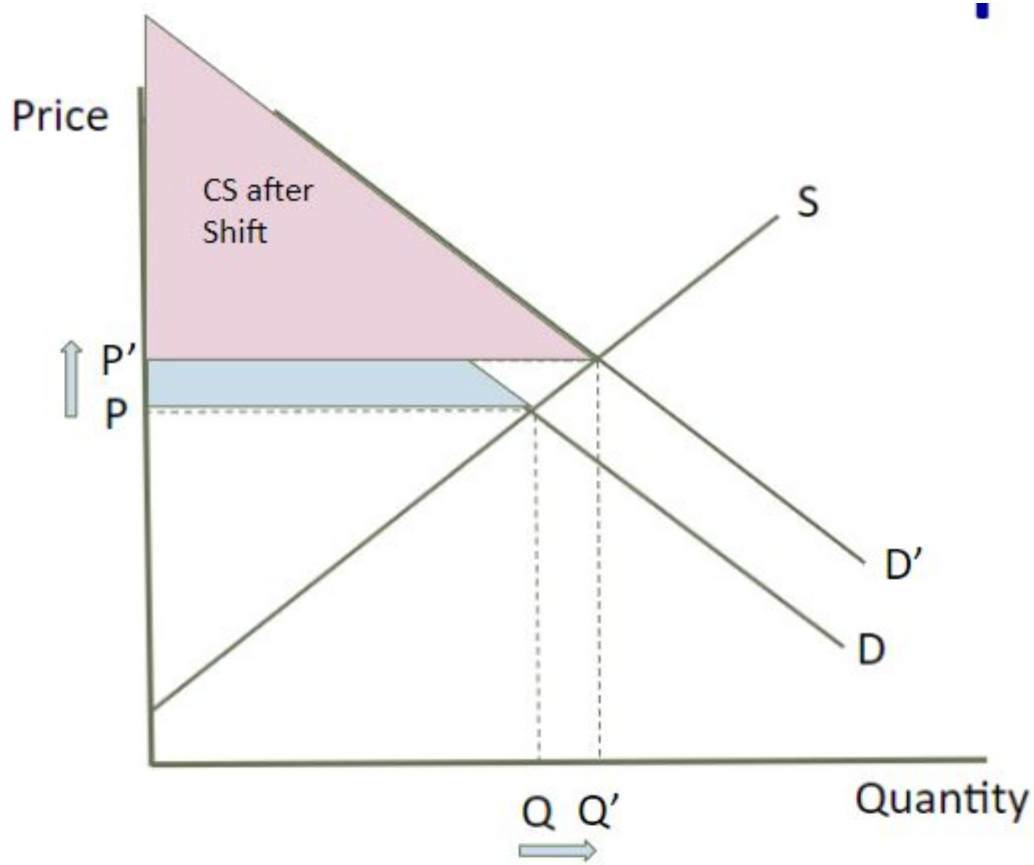
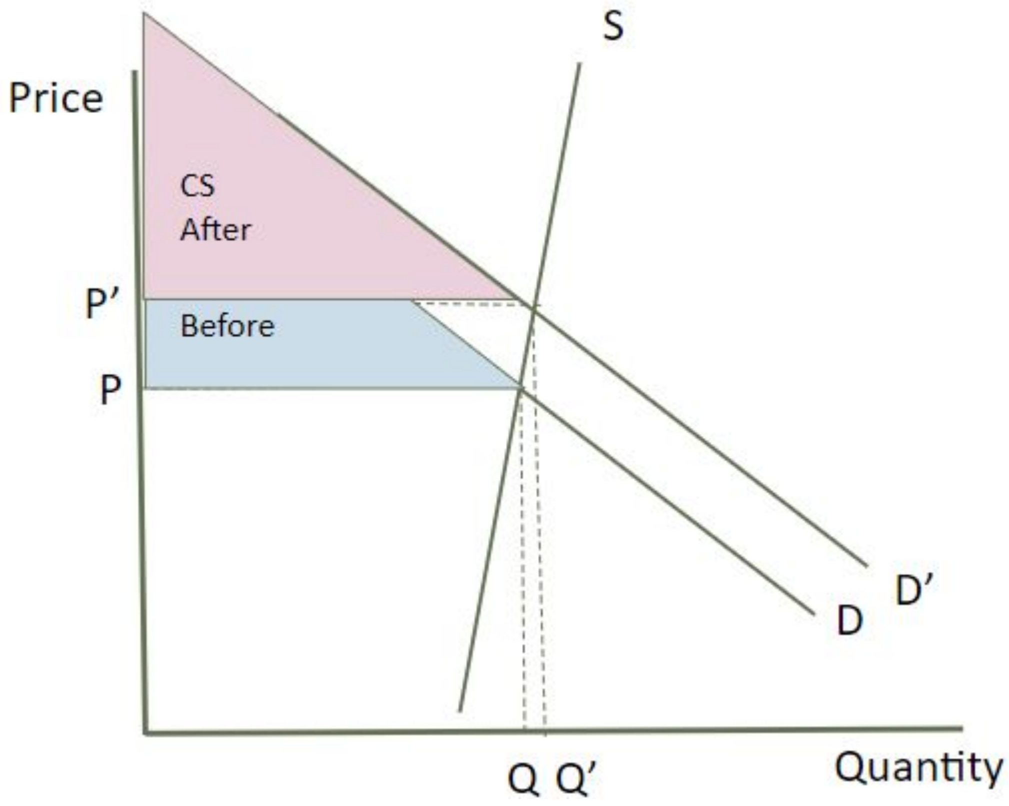
EK: Factors that shift the market demand and market supply curves cause price, quantity, consumer surplus, producer surplus, and total economic surplus (within that market) to change. The impact of the change depends on the price elasticities of demand and supply.

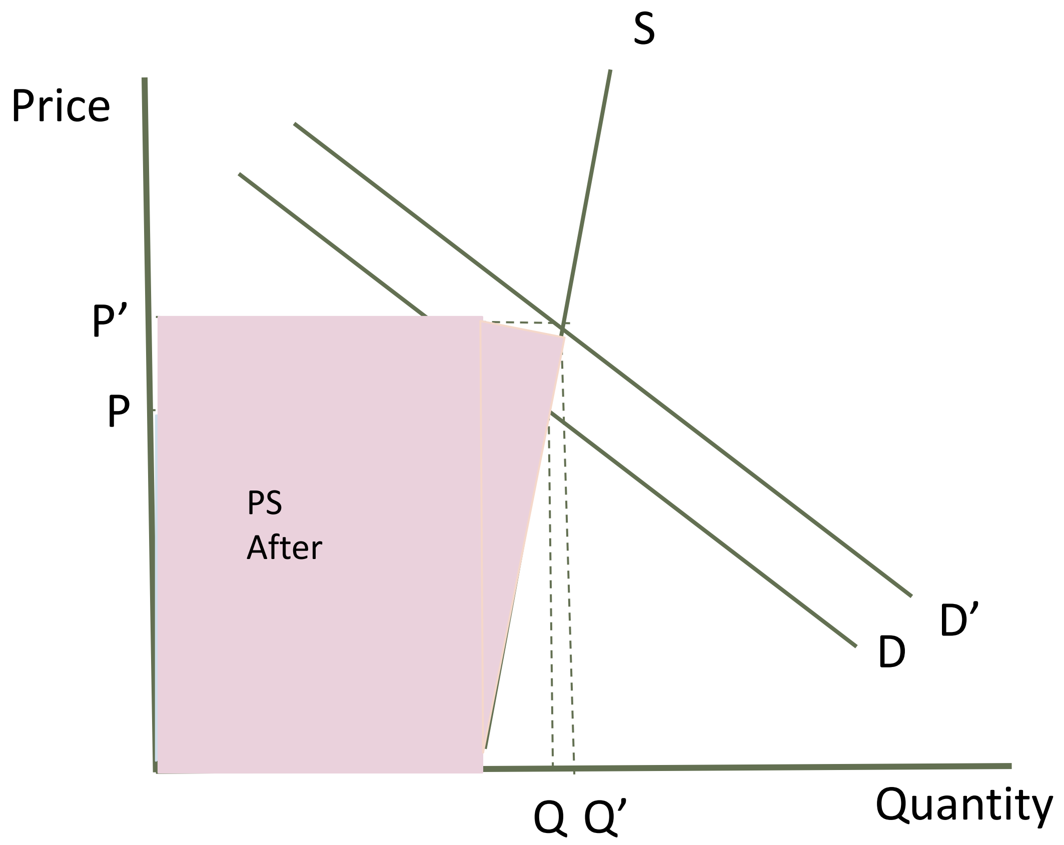
Slope, CS and PS with increase in demand



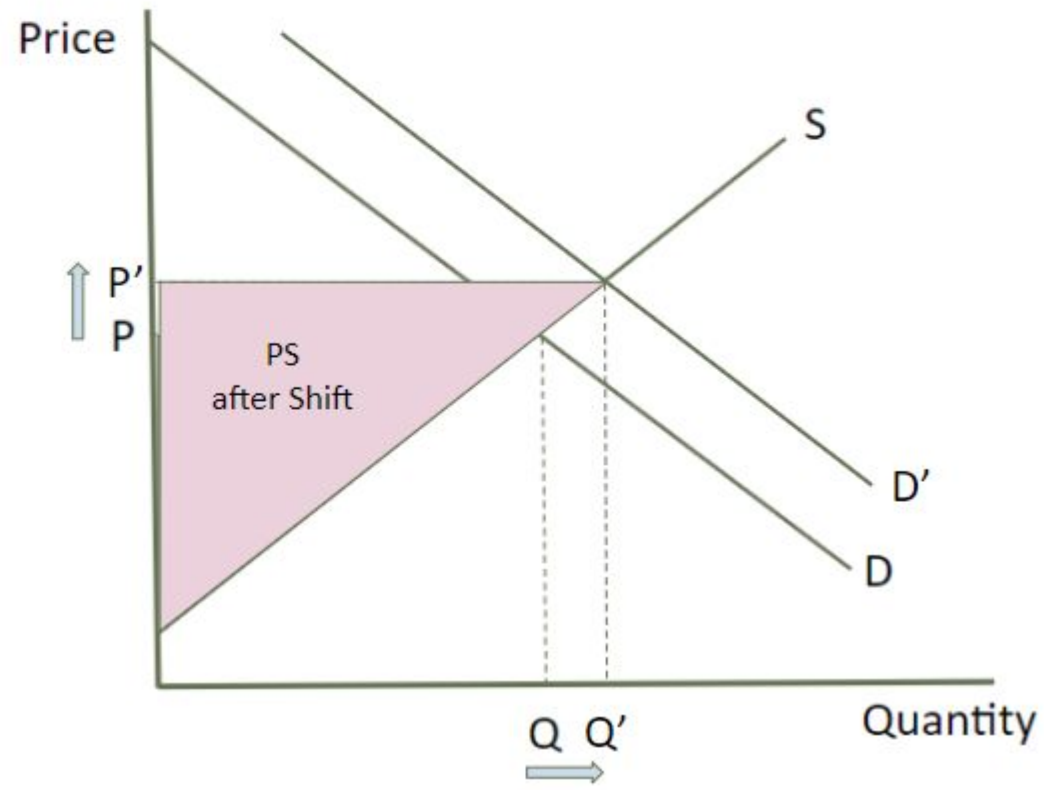

Price
CS after
Shift
S
P’
P
D’
D
Q Q’
Quantity

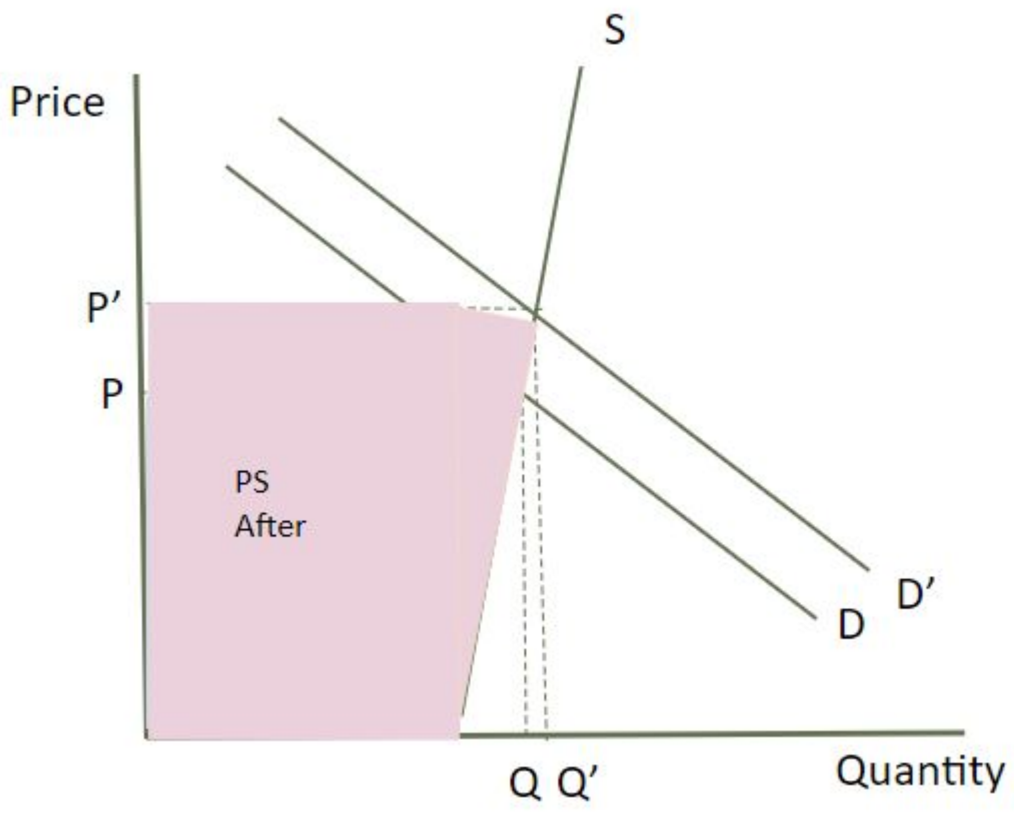

S
Price
CS
After
P’
Before
P
D’
D
Q Q’
Quantity

Slope, CS and PS with increase in demand

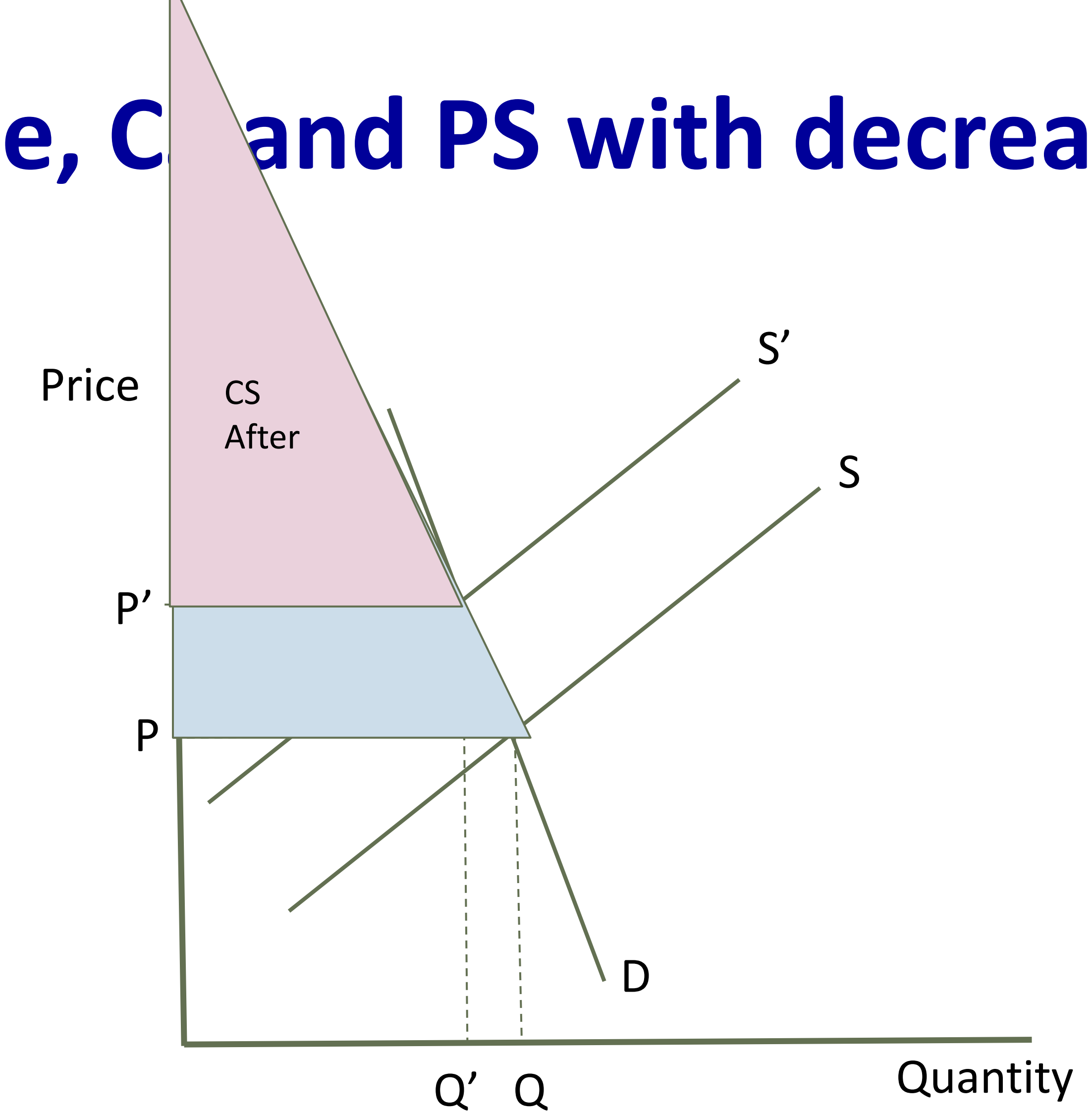


Slope, CS and PS with increase in demand

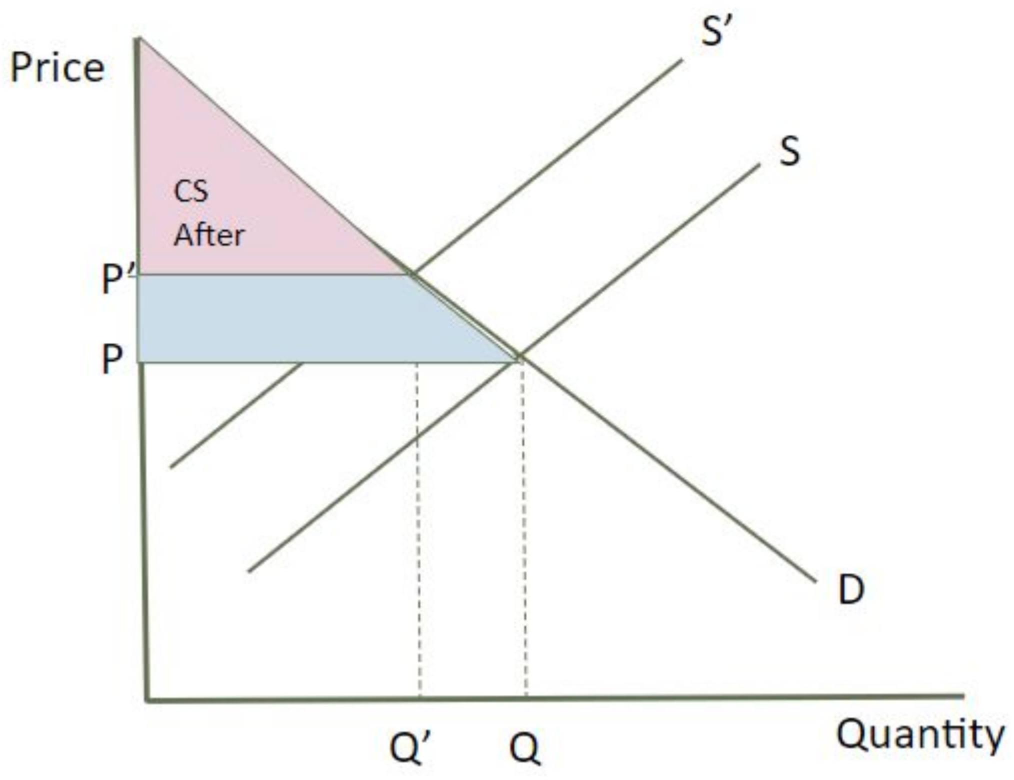


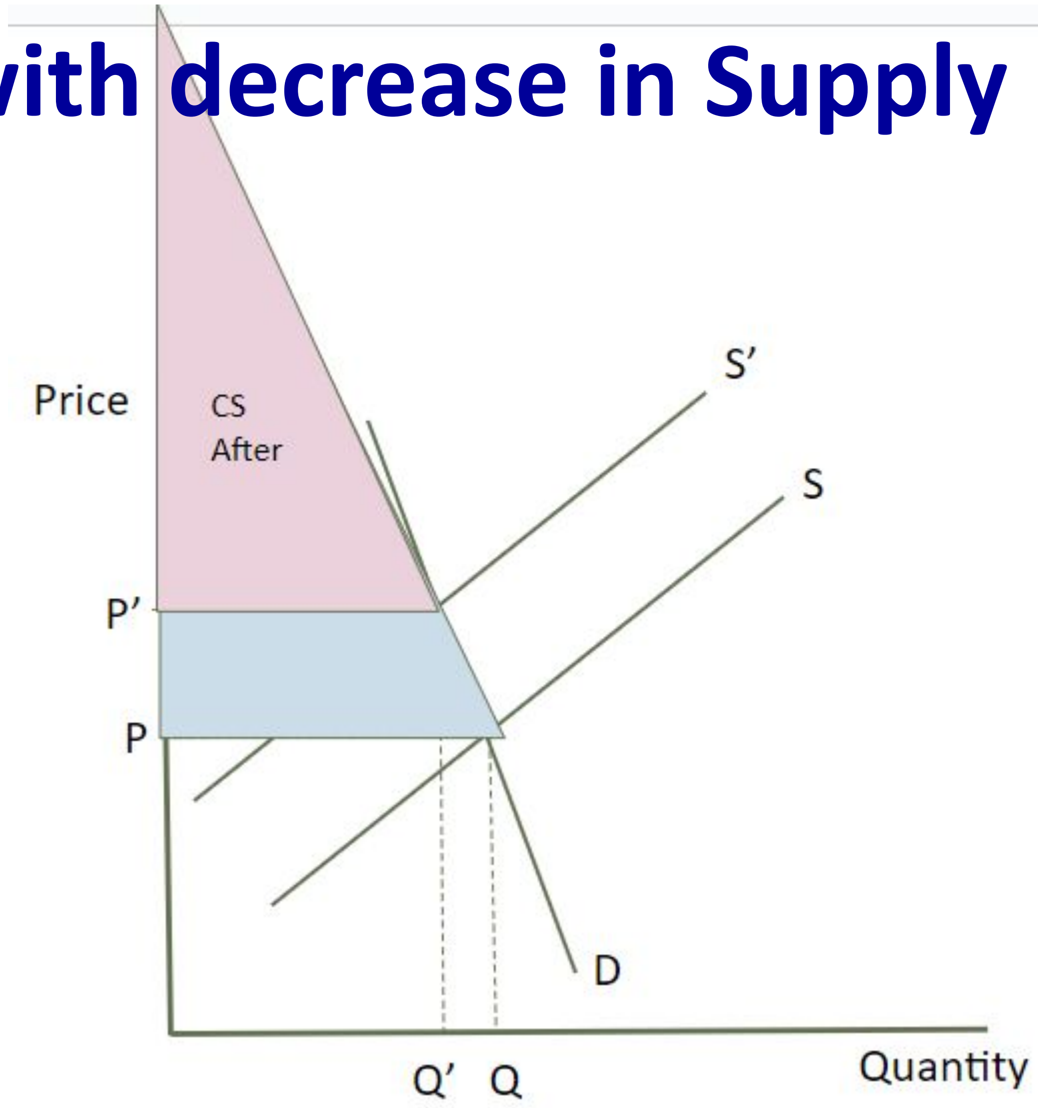


Slope, CS and PS with decrease in Supply

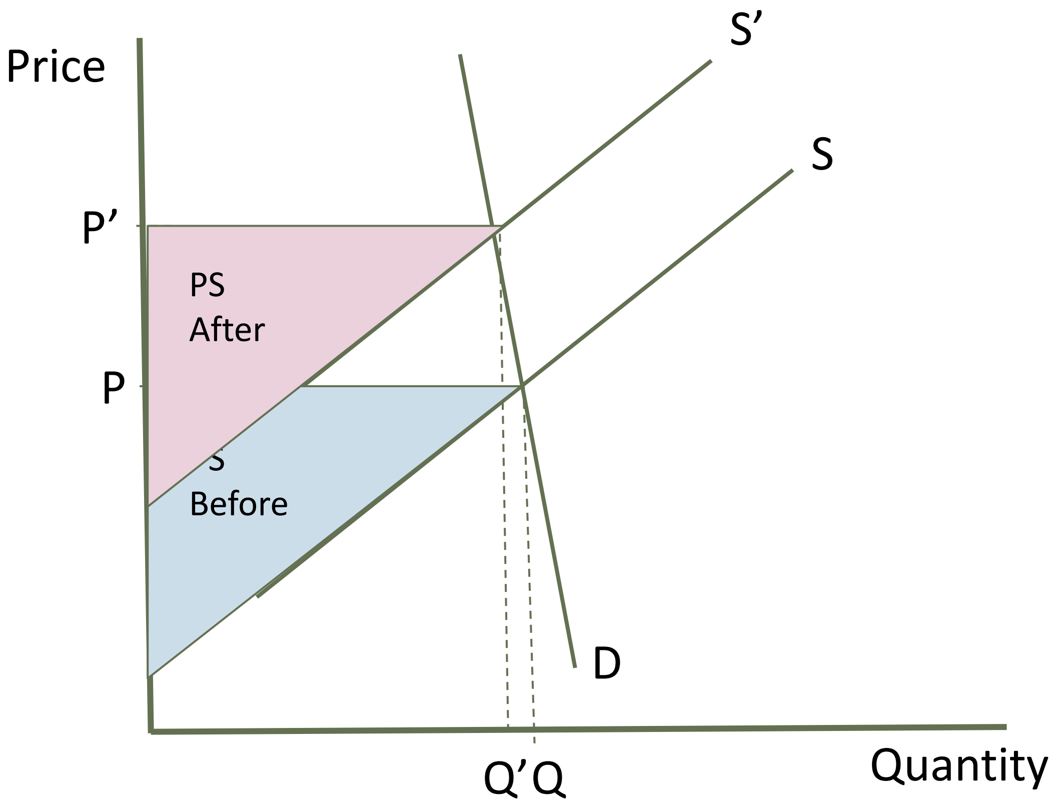


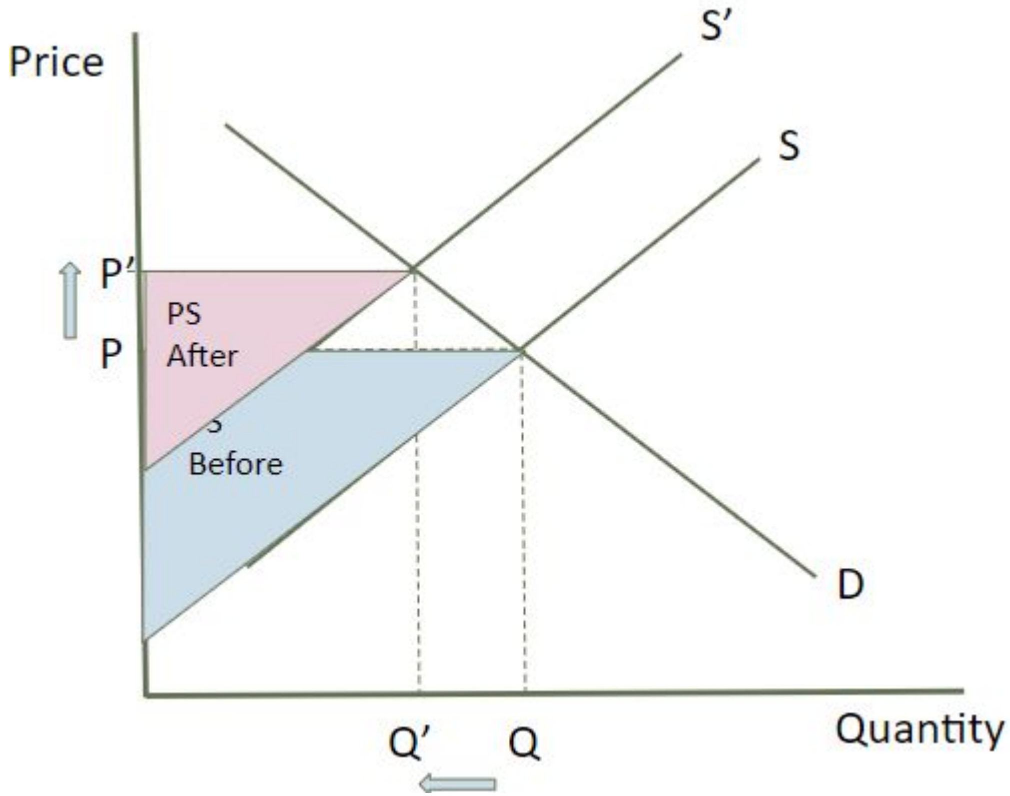
Slope, CS and PS with decrease in Supply

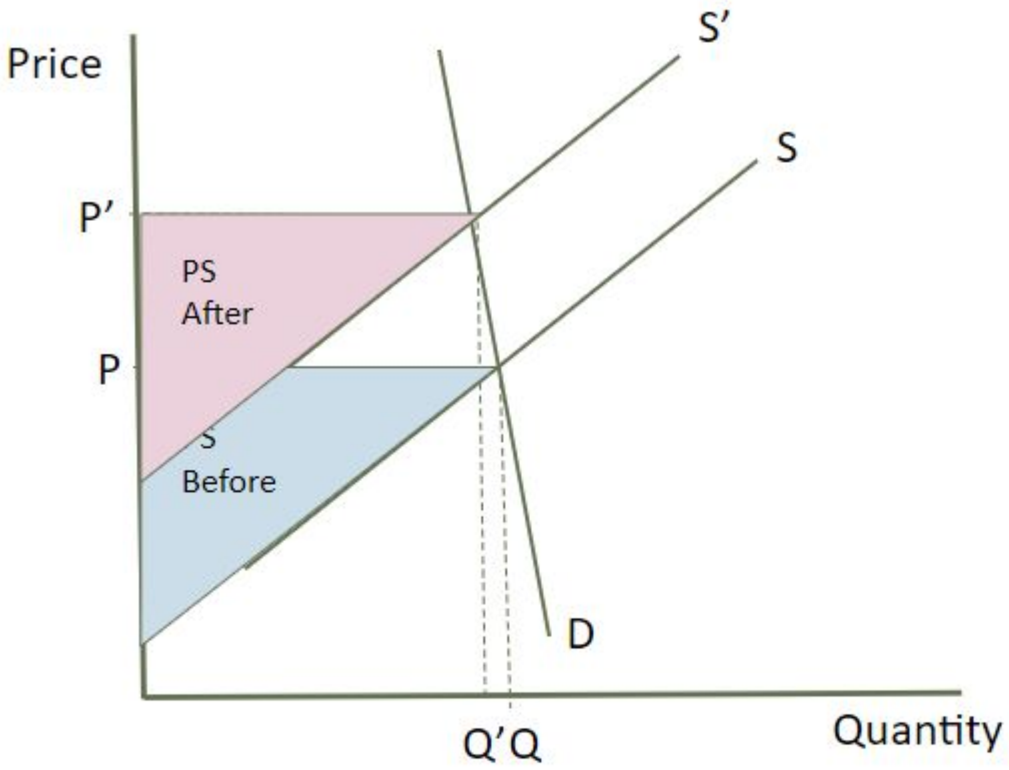




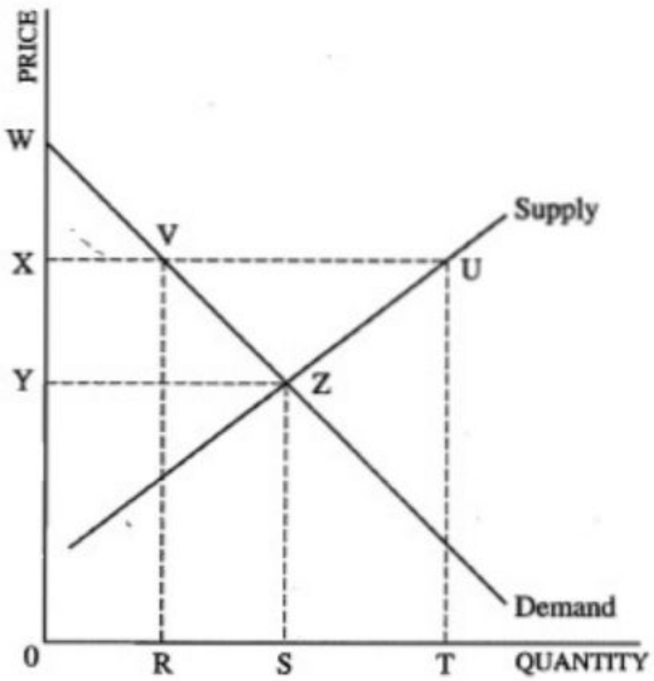
Slope, CS and PS with decrease in Supply




Price
S'
S
P'
P
PS
After
S
Before
D
Q'
Q
Quantity


Price
S'
S
P'
P
PS
After
S
Before
D
Q'Q
Quantity

The following questions refer to the graph below. The market is currently in equilibrium



In a competition equilibrium consumer surplus is the area of

In a competition equilibrium consumer surplus is the area of

- (A) UVZ
- (B) WYZ
- (C) RVUT
- (D) XVZY
- (E) 0YZS

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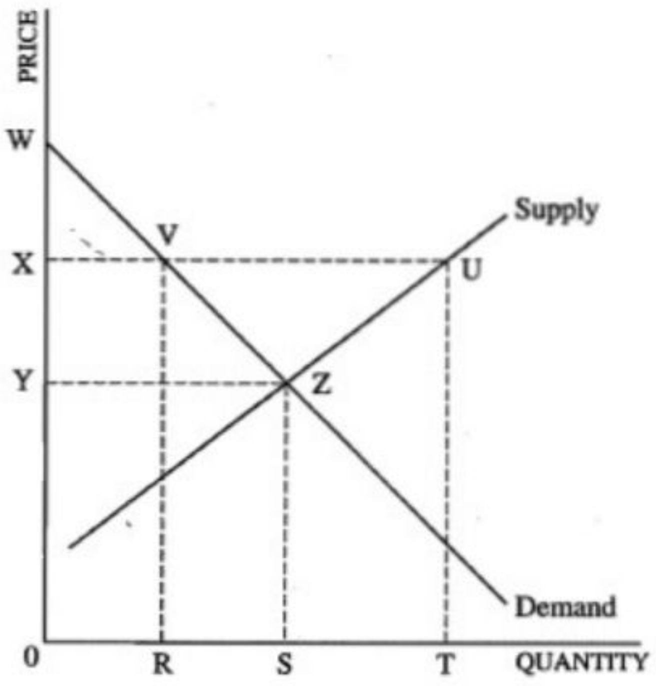

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- (B) WYZ
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A decrease in raw material prices will change the equilibrium price and quantity in a market in which of the following ways?

Ⓐ

Price	Quantity
Increase	Increase

Ⓑ

Price	Quantity
Increase	Decrease

Ⓒ

Price	Quantity
Decrease	Increase

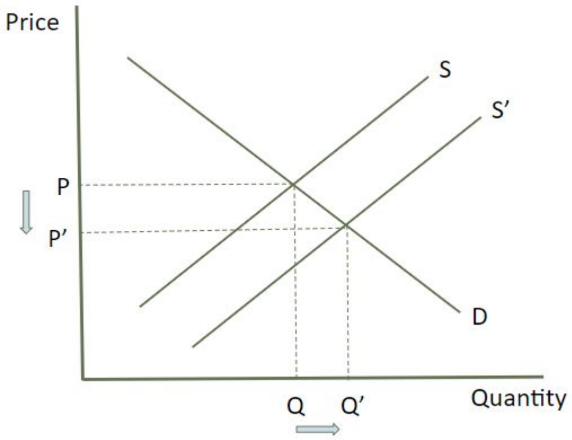
Ⓓ

Price	Quantity
Decrease	Decrease

Ⓔ

Price	Quantity
No change	Increase

A decrease in raw material prices will change the equilibrium price and quantity in a market in which of the following ways?



(A)

Price	Quantity
Increase	Increase

(B)

Price	Quantity
Increase	Decrease

(C)

Price	Quantity
Decrease	Increase

(D)

Price	Quantity
Decrease	Decrease

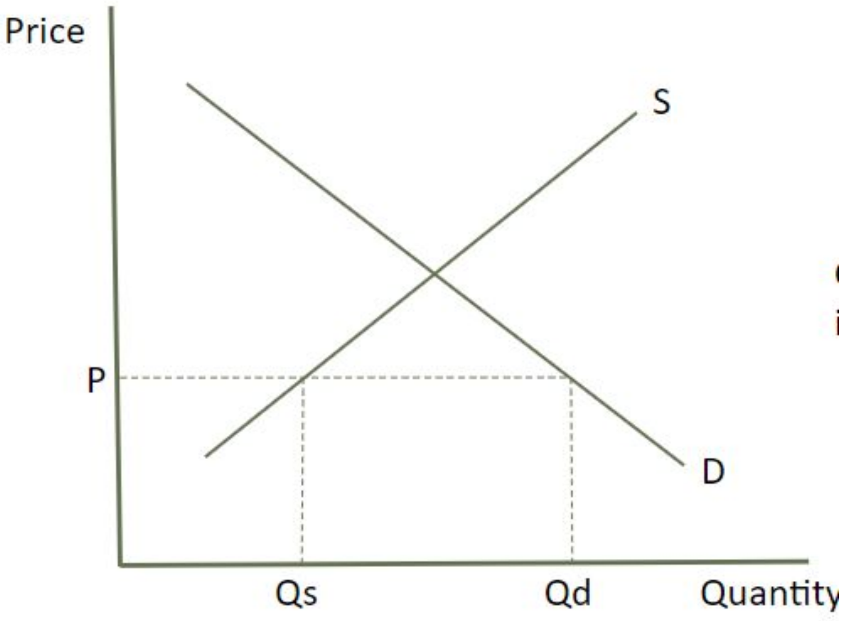
(E)

Price	Quantity
No change	Increase

Which of the following occurs if the price of oranges is below the equilibrium price?

- (A) There is a surplus of oranges.
- (B) The quantity supplied of oranges is greater than the quantity demanded.
- (C) The quantity supplied of oranges is greater than the quantity sold.
- (D) The quantity purchased of oranges is greater than the quantity sold.
- (E) The quantity demanded of oranges is greater than the quantity supplied.

Which of the following occurs if the price of oranges is below the equilibrium price?



(A) There is a surplus of oranges.

(B) The quantity supplied of oranges is greater than the quantity demanded.

(C) The quantity supplied of oranges is greater than the quantity sold.

(D) The quantity purchased of oranges is greater than the quantity sold.

(E) The quantity demanded of oranges is greater than the quantity supplied.

Which of the following best illustrates the concept of consumer surplus?

(A) A thirsty athlete pays $0.85 for a cold drink when she would have gladly paid $1.50 for the drink.

(B) An individual who is willing to accept a job at $7.50 per hour is offered $7.00 per hour.

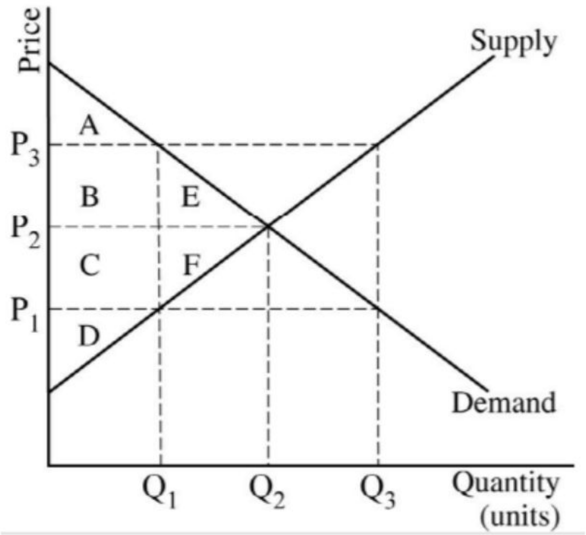
(C) An individual pays the sale price of $15.00 for the same shirt that the individual refused to purchase earlier at $18.00.

(D) An individual finds that the price of artichokes, a food she dislikes, has been reduced by 50 percent.

(E) A wood-carver has a marginal cost of $5.00 for a unit of output, but sells that unit at $6.00.

Which of the following best illustrates the concept of consumer surplus?

- (A) A thirsty athlete pays $0.85 for a cold drink when she would have gladly paid $1.50 for the drink. ✔
- (B) An individual who is willing to accept a job at $7.50 per hour is offered $7.00 per hour. Producer Surplus
- (C) An individual pays the sale price of $15.00 for the same shirt that the individual refused to purchase earlier at $18.00. Quantity Demanded
- (D) An individual finds that the price of artichokes, a food she dislikes, has been reduced by 50 percent. No Demand
- (E) A wood-carver has a marginal cost of $5.00 for a unit of output, but sells that unit at $6.00. Producer Surplus



Total economic surplus will be maximized at which of the following price and quantity combinations?

Ⓐ P_3 and Q_3

Ⓑ P_3 and Q_1

Ⓒ P_2 andQ_2

Ⓓ P_1 and Q_1

Ⓔ P_1 and Q_3

Total economic surplus will be maximized at which of the following price and quantity combinations?

Ⓐ P_3 and Q_3

Ⓑ P_3 and Q_1

Ⓒ P_2 andQ_2

Ⓓ P_1 and Q_1

Ⓔ P_1 and Q_3

What are your questions?