EQUILIBRIUM DEMAND AND SUPPLY
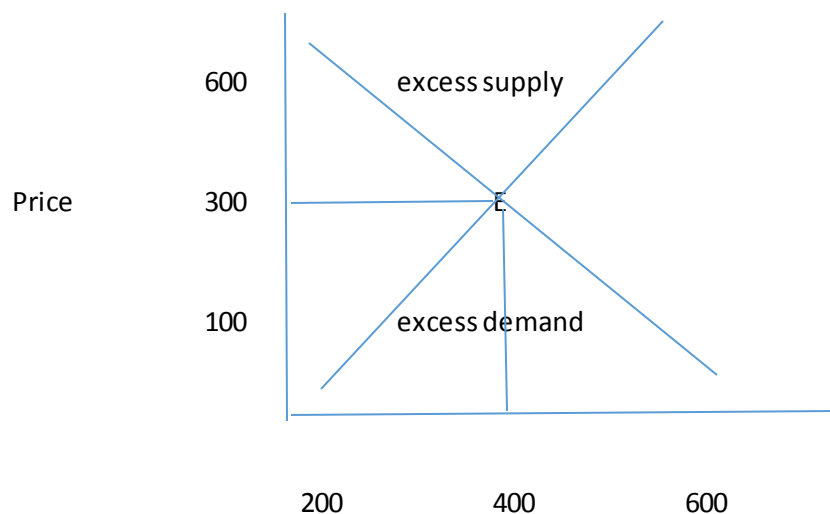
This is when demand equal supply at a particular price

Equilibrium price

This price where quantity demanded equals quantity supplied

DEMAND AND SUPPLY SCHEDULE

PRICE	QUANTITY DEMANDED	QUANTITY SUPPLIED
6	100	700
5	200	600
4	300	500
3	400	400
2	500	300
1	600	200

Quantity demanded and supplied

Equilibrium price and quantity

Determinate of equilibrium price and quantity using functional relationship

Demand and supply function can be used to determine the equilibrium price and quantity. Let us consider the following demand and supply function

Qd= 20-2p

Qs=6p-12

Determine the equilibrium price and quantity and excess supply at the price of 8

At equilibrium Qd =Qs

20-2p=6p-12

20+ 12= 6p +2p

32=8p

32/8=8 P/8

4=P

P=4

To determine the equilibrium quantity substitute p =4 in the function

Qd= 20-2(4)

Qd= 20-8

Qd= 12

Qs= 6(4)-12

Qs= 24-12

Qs= 12

Qd=Qs at 12

The equilibrium quantity equals 12

At price of 8,

Qd=20-2(8)

Qd= 20-16

Qd= 4

Qs= 6(8)-12

Qs= 48-12

Qs= 36

Excess supply at price of 8=

36-4=32

ES=32

ASSIGNMENT

The market for apples is represented by the following demand and supply functions:

$Qd = 30 - p$;
$Qs = 15 + 2p$.

(a) Prepare a demand and supply schedule for the market, given the prices $2.00, $4.00 and $7.00.

(b)   (i) Determine the equilibrium price and equilibrium quantity of apples in the market.

(ii) If the price of apple is fixed at $3.00, what will be the excess demand or excess supply?

(c) Suppose the demand function changed to $Qd = 40 - p$. Using the prices in (a) above:

(i) Prepare a new demand schedule; (ii) does it represent an increase or a decrease in demand? (iii) explain your answer in (c)(ii) above