

Assignment

The following are the demand and supply equations of market for fish

$$P = 600 - 3q^d$$

$$P = -50 + 2q^s$$

(i) Determine the equilibrium price and quantity that would prevail in this market.

Solution

$$P = 600 - 3q^d$$

$$P = -50 + 2q^s$$

So, we can rewrite the equations

$$q^d = (600 - P)/3$$

$$q^s = (P + 50)/2$$

Equate these expressions:

$$q^d = q^s$$

Solve equation:

$$200 - P/3 = P/2 + 25$$

$P = 210$ is the equilibrium price

So, we can find quantity

$$q^d = (600 - P)/3$$

$$q^d = 130$$