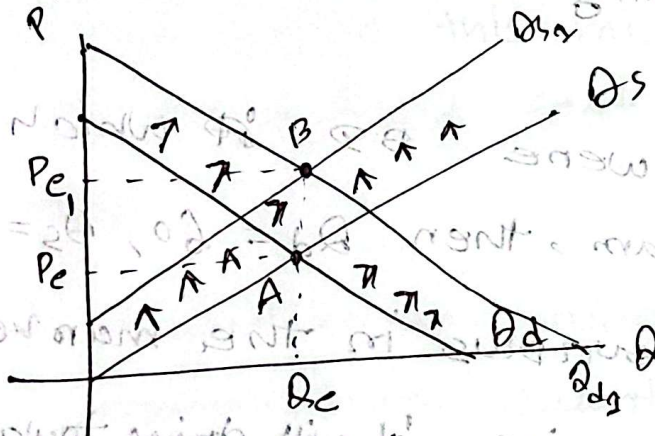Name: Tabassum Sumaiya
ID: 0112230295
course: ECO 4101 (D)

Question 1

Due to the importance of blueberries in medical purpose, demand will increase which will create a rightward shift in curve

Also due to drought, natural disaster supply of blueberries will hinder which will create a leftward shift in the curve.
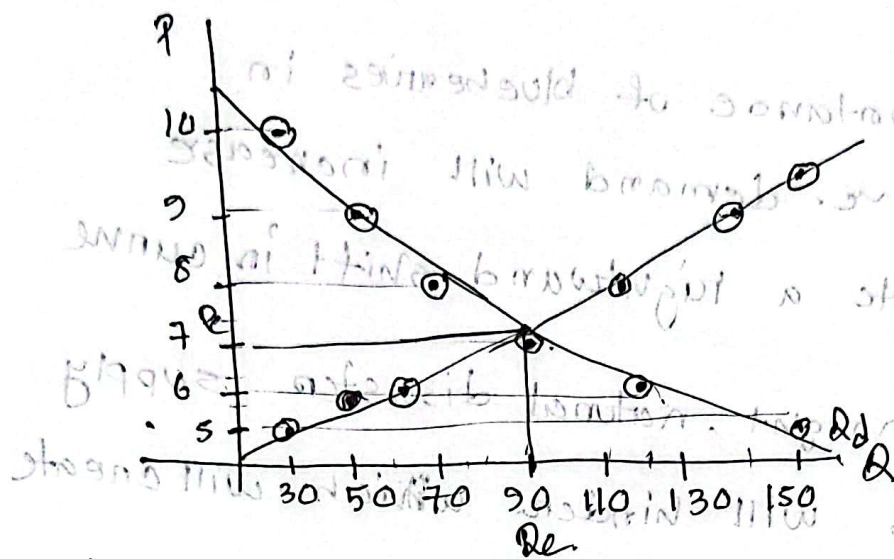
If we consider this,



So we can say price will definitly increase,

But Quantity supply and Quantity demand shift, means Quantity will depend, which effect more.

Question 2



P axis with values 10, 9, 8, 7, 6, 5
Q axis with values 30, 50, 70, 90, 110, 130, 150
Qe, Qd, Qs labels on graph

a)

equilibrium price : 7 $

equilibrium Quantity : 90 kg

b) If actual price were $9, which
is above equilibrium, then $Q_d = 60$, $Q_s = 125$

$Q_d < Q_s$ means surplus in the market.

By decreasing the price, it will drive towards
equilibrium.

c) If actual price were $5, which is
bleow equilibrium then $Q_d = 150$, $Q_s = 36$,

$Q_d > Q_s$, which means shortage in the market,

By increasing the price, drive toward
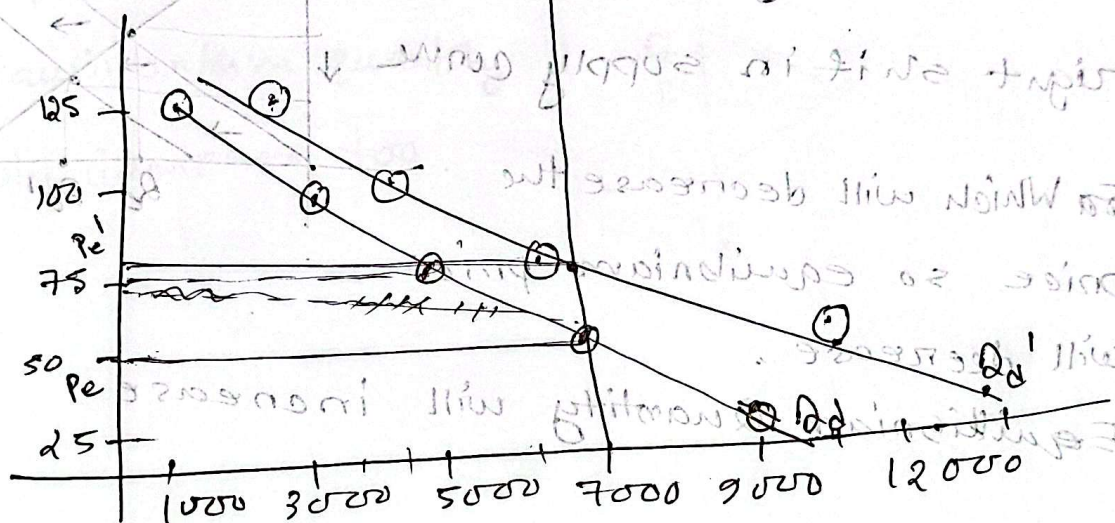equilibrium.

# Question 3
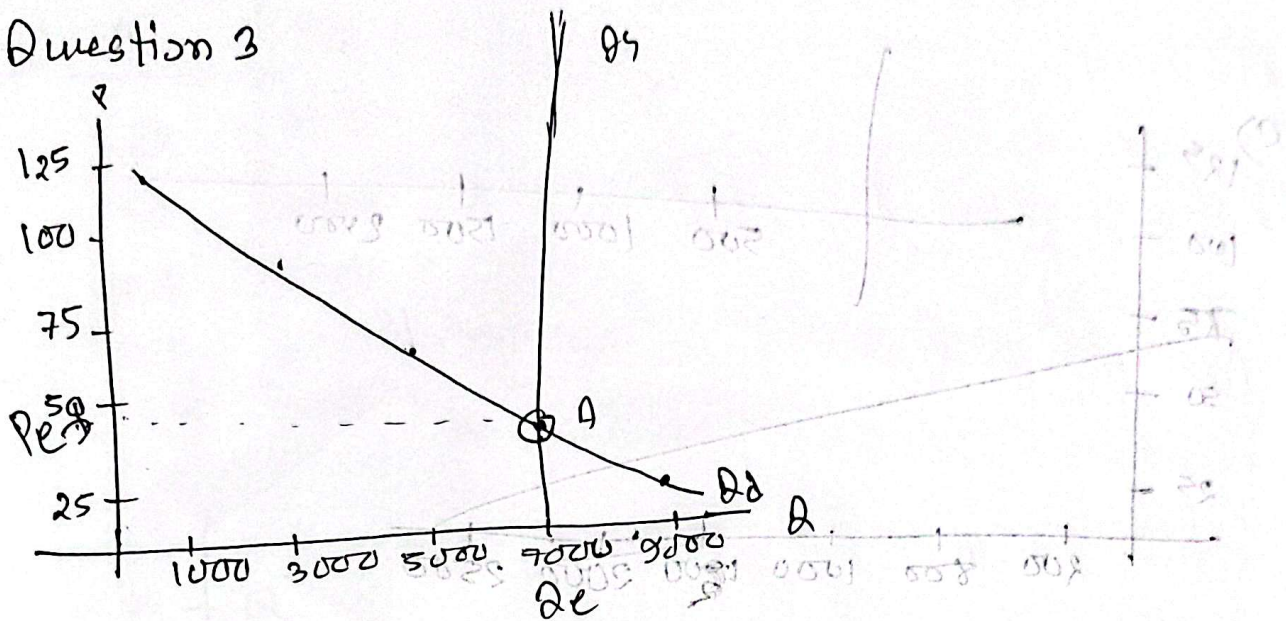


a) From the supply curve, we can tell that even if price changes the supply of tickets stays same this might occur because of limited & fixed seat in concert venue. ~~that~~
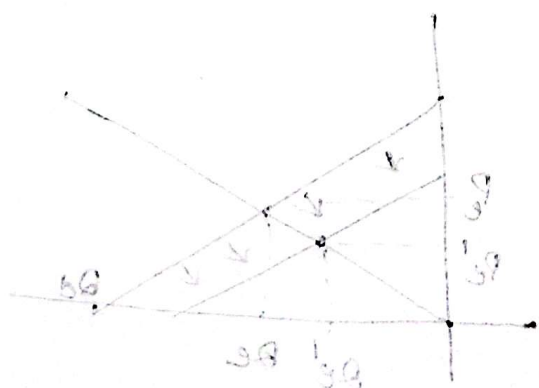
b) equilibrium price $50
equilibrium quantity 7000

c)

| P | Qd (total) |
|---|---|
| 25 | 9000 + 3000 = 12000 |
| 50 | 7000 + 2500 = 9500 |
| 75 | 5000 + 1500 = 6500 |
| 100 | 3000 + 800 = 3800 |
| 1250 | 1000 + 7900 = 1200 |



new equilibrium price = 77 (approx)
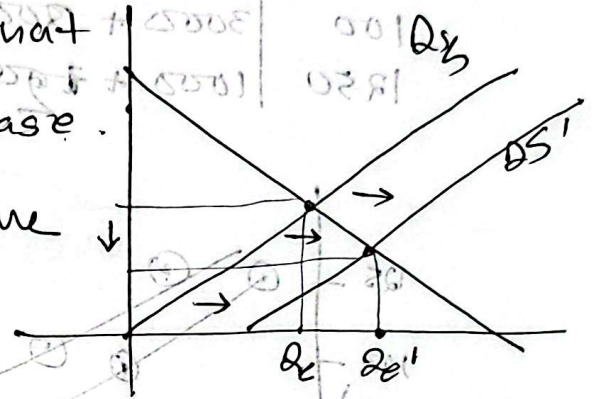
new equilibrium Quantity = 7000

⑤

Question 4

a) The market for electric vehicles

Cost has been reduced, so that
means supply will increase.
right shift in supply curve ↓

Which will decrease the
price so equilibriam price
will decrease.
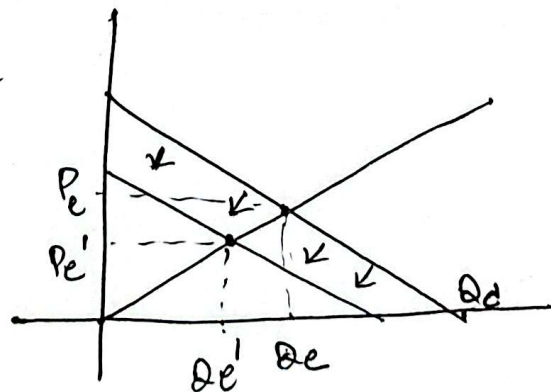Equilisriam Quantity will increase

b) Market for gasoline / petrol.

Demand for gasoline/ petrol will decrease.
so a leftward shift in demand curve
equilibrium
So price will decrease

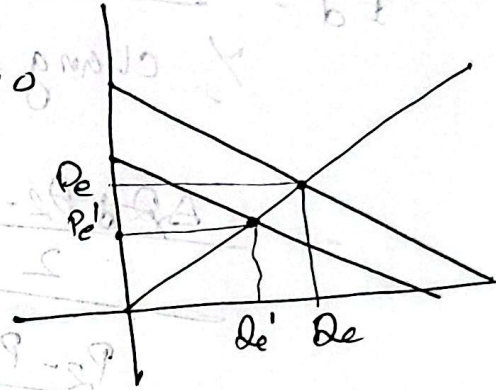Equilibriam quantity
will decrease too

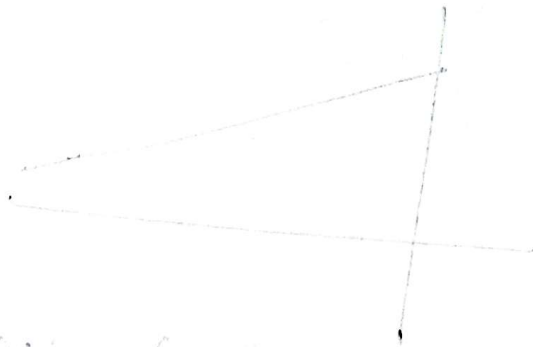c) The market too traditional internal combustion engine vehicles.

demand will decrease . which will cnease a leftward shift.

so price will decrease too

Equilibrium quantity will decrease too.

$Q_e$
$P_e'$

$Q_e'$  $Q_e$

Question 5

a) i) business travelers:

$P_1 = 100 \qquad Q_1 = 2200$

$P_2 = 120 \qquad Q_2 = 2000$

$$|E_d| = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{P_2 + P_1}{P_2 - P_1}$$

$$= \frac{2000 - 2200}{2200 + 2000} \times \frac{120 + 100}{120 - 100}$$

$|E_d| = .52$

which is $|E_d| \leq 1 \implies$ inelastic.

ii) students.

$P_1 = 100 \qquad Q_1 = 900$

$P_2 = 120 \qquad Q_2 = 600$

$$|E_d| = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{P_2 + P_1}{P_2 - P_1}$$

$$= \frac{600 - 900}{600 + 900} \times \frac{120 + 100}{120 - 100}$$

$|E_d| = 2.2$ which $|E_d| > 1$
elastic demand.

b) from a) we can see student has elastic demand and business travellers has inelastic demand.

as we know demand tends to be more elastic if the good is luxary and has large number of close substitute. and demand tends to ends to be more inelastic if it's a necessary good and has smaller number of close substitute.

as we can slay train tickets tends to be a luxary good for student and has many other substitute that why it's more elastic for student than business travelers.

Question 6

Price elasticity of demand is the percentage change in quantity demanded given a percentage change in the price.

Total revenue is the amount paid by buyers and recieved by sellera of a good. $TR = P \times Q$

Here price increase demand Quantity demanded decrease 15% with total revenue increase 25% which

% $\Delta Q = 15\%$.          initial $TR_1 = P_1 \times Q_1$

% $\Delta TR = 25\%$         $TR_2 = P_2 \times Q_2$

as $\Delta Q$ decrease price will increase.
if price of goods and total revenew increase demand must be inelastic

Question 7.

a)

i) income = $30,000

$P_1 = 15$  $Q_1 = 28$

$P_2 = 20$  $Q_2 = 20$

$$|E_d| = \frac{Q_2 - Q_1}{Q_1 + Q_2} \times \frac{P_2 + P_1}{P_2 - P_1} = 1.16$$

$|E_d| > 1$  elastic.

ii) income = $36,000

$P_1 = 15$  $Q_1 = 40$

$P_2 = 20$  $Q_2 = 32$

$$|E_d| = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{P_2 + P_1}{P_2 - P_1} = .77$$

$|E_d| < 1$, inelastic.

b)

i) $Y_1 = 30000$  $Q_1 = 20$

$Y_2 = 36000$  $Q_2 = 32$

$$Ey = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{Y_2 + Y_1}{Y_2 - Y_1} = 2.5$$

$$Ey > 0$$

ii) $Y_1 = 30000$  $Q_1 = 12$

$Y_2 = 36000$  $Q_2 = 22$

$$Ey = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{Y_2 + Y_1}{Y_2 - Y_1} = 3.24$$

c) as we know if $Ey > 0$ its normal goods

as for both income elasticity calculation

$Ey > 0$ so this streaming service is a

normal good.