Consumer Equilibrium:

The consumer equilibrium is achieved when: $MU_X/P_X = MU_Y/P_Y$ $Q_X * P_X + Q_Y * P_Y = Y$ When: MU_X : marginal utility for (x) good. MU_Y : marginal utility for (y) good. $P_{X: (x) \text{ price}}$ P

P_{Y: (y) price}

 Q_X : (x) quantity

 $Q_{Y:(y) \text{ quantity}}$

Y: income

Example:

When $p_x = 5000$ and $p_y = 10000$ and y = 45000 ID find consumer equilibrium?

X				У				
Q	TU	MU	MU/PX	Q	TU	MU	MU/PY	
1	40			1	50			
2	75			2	90			
3	105			3	120			
4	130			4	140			
5	150			5	155			
6	165			6	165			
7	175			7	170			
8	180			8	170			

Х				у				
Q	TU	MU	MU/PX	Q	TU	MU	MU/PY	
1	40	40		1	50	50		
2	75	35		2	90	40		
3	105	30		3	120	30		
4	130	25		4	140	20		
5	150	20		5	155	15		
6	165	15		6	165	10		
7	175	10		7	170	5		
8	180	5		8	170	0		

Х				у			
Q	TU	MU	MU/PX	Q	TU	MU	MU/PY
1	40	40	8	1	50	50	5
2	75	35	7	2	90	40	4
3	105	30	6	3	120	30	3
4	130	25	5	4	140	20	2
5	150	20	4	5	155	15	1.5
6	165	15	3	6	165	10	1
7	175	10	5	7	170	5	0.5
8	180	5	1	8	170	0	0

Х				у				
Q	TU	MU	MU/PX	Q	TU	MU	MU/PY	
1	40	40	8	1	50	50	5	
2	75	35	7	2	90	40	4	
3	105	30	6	3	120	30	3	
4	130	25	5	4	140	20	2	
5	150	20	4	5	155	15	1.5	
6	165	15	3	6	165	10	1	
7	175	10	5	7	170	5	0.5	
8	180	5	1	8	170	0	0	

1.

$$MU_X/P_X = MU_Y/P_Y$$
$$4 = 4$$

2.

 $\mathbf{Q}_{\mathbf{X}} * \mathbf{P}_{\mathbf{X}} + \mathbf{Q}_{\mathbf{Y}} * \mathbf{P}_{\mathbf{Y}} = \mathbf{Y}$

5 * 5000 + 2 * 10000 = 45000

Questions:

- 1. Give the consumer surplus definition?
- 2. What is The consumer surplus uses?
- 3. Draw graphic explain consumer surplus?
- 4. Writ the equation of Estimates the change in consumer surplus?
- 5. When $p_x = 3$ and $p_y = 5$ and y = 32 ID find consumer equilibrium as table below?

Q	1	2	3	4	5
TUx	12	22	29	32	32
TUY	20	35	45	50	50

6. Translate the following paragraph:-Consumer Industries

Consumer industries companies are manufacture goods that affect nearly every part of our daily lives—everything from clothing and shoes to home uses and cell phones. These products are routed through sell channels to reach the end consumer. Consumer industries consists of several different business parts, including consumer packaged electronics goods; consumer and durables; goods; soft and

telecommunications service suppliers. Each business part within consumer industries is faced with similar vet distinct business challenges. There are similarities in the consumers that purchase these products, and these parts require a similar set of strategies to address them such as product innovation, fashion, and pricing strategies, as well as and service product packages. Differences arise from the way in which the completing of these strategies ties to the channel, competition, execution, and completion.