**Worksheet 1 Elasticity ECO 101 Section 5**

Directions:

If a shift in demand and/or supply has taken place, identify the change and list the determinant. Graph it and label everything (D1, D2, S1, S2, P1, P2, Q1, Q2, shift arrows, etc.).

1. Consumer income has risen and as a result it has been that they want to buy latest televisions in the market.
2. The price of televisions is supposed to rise in the next few months as a natural disaster has halted the transportation of any electronics to stores.
3. ****Scenario: The following schedule shows a change in demand based on the price of a related product. The demand increased, as shown in the table.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

$6.00

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Price Per Compact Disc | Quantity Demanded (old) | Quantity Demanded (new) | Quantity Supplied | Shortage or Surplus (QS - new QD)  5.00    4.00 |
| $6 | 0 | 4 | 9 | 3.00 |
| 5 | 2 | 6 | 6 |  |
| 4 | 3 | 7 | 5 | 2.00 |
| 3 | 4 | 8 | 4 | 1.00 |
| 2 | 6 | 11 | 3 |  |
| 1 | 9 | 13 | 0 |  |

00

1. What happened to the original demand curve? b. How was the equilibrium point affected? c. What is the surplus at $6.00? d. What is the shortage at $2.00? e. How did this scenario benefit the supplier of CDs?
2. If the demand and supply curve for computers are: D = 100 - 6P, S = 28 + 3P, where P is the price of computers, what is the quantity of computers bought and sold at equilibrium.
3. A product has a PED (price elasticity of demand) of 0.8. At present it sells for $10 and sales have reached 100,000 per month. The firm is planning a price increase to $12 each. What can it expect to happen to sales and revenue if it goes ahead with the rise?
4. A firm is known to have a price elasticity of supply of 0.5. The company is supplying 10,000 units to the market at the moment, where the price is $25 each. If the price increases to $30 each, by how much will supply increase, and what will their new output be?
5. A butcher sells beef and lamb only. It is observed that when the price of beef increases by 15% the demand for lamb increases by 10%. What is the cross price elasticity for lamb against the price of beef?
6. The cross price elasticity between two goods X and Y is known to be - 0.8. If the price of good Y rises by 20%, how will the demand for X change?