Assignment 3

In a quantity-price elasticity context, a demand price elasticity factor is a measure of how sensitive the demand for a good is to changes in its price. It is calculated as the percentage change in quantity demanded divided by the percentage change in price.

1. A price increase of $2 per kg in the market for apples results in a decrease of 12 units in the quantity demanded. What is the price elasticity factor?

2. The wholesale market supply price is $3 per kg for apples, and the quantity sold in the market is 100 units. If an increase in demand of 50 units is needed to make a slave supply of apples, what is the required change in the price?

3. In the following figure, the crossovers are caused by:

   - A. A decrease in the government's budget.
   - B. A decrease in the number of consumers.
   - C. An increase in the number of suppliers.
   - D. An increase in the price of substitute goods.

4. If supply increases while demand remains the same, the resultant effect is to:
   - A. Increase the price and decrease the quantity.
   - B. Decrease the price and increase the quantity.
   - C. Increase the price and increase the quantity.
   - D. Decrease the price and decrease the quantity.

5. Demand for a good increases when income increases. In such a case, the price elasticity factor of the good:
   - A. Remains constant.
   - B. Increases.
   - C. Decreases.
   - D. Changes unpredictably.

6. A decrease in the price of substitute goods results in:
   - A. An increase in the demand for the substitute good.
   - B. A decrease in the demand for the substitute good.
   - C. A decrease in the supply of the substitute good.
   - D. An increase in the demand for the complementary good.

7. The following table indicates the demand for a product at different prices:

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10</td>
<td>100</td>
</tr>
<tr>
<td>$9</td>
<td>150</td>
</tr>
<tr>
<td>$8</td>
<td>250</td>
</tr>
<tr>
<td>$7</td>
<td>350</td>
</tr>
<tr>
<td>$6</td>
<td>450</td>
</tr>
</tbody>
</table>

   a. Calculate the price elasticity factor.
   b. Determine the point elasticity at a price of $8.
   c. Is this demand unitary elastic, elastic, or inelastic?

8. During a recession, the demand for luxury goods decreases, while the demand for necessities remains constant. This is an example of:
   - A. Income elasticity.
   - B. Cross-price elasticity.
   - C. Supply elasticity.
   - D. Demand elasticity.

9. The market supply curve is graphically represented as:
   - A. A horizontal line.
   - B. A downward-sloping line.
   - C. An upward-sloping line.
   - D. A rightward-sloping line.

10. If the demand for a product is perfectly elastic, a small increase in price will:
    - A. Increase the quantity demanded.
    - B. Decrease the quantity demanded.
    - C. Have no effect on the quantity demanded.
    - D. Result in a positive revenue change.