1. Identify whether the following events will be a shift, no change, or a movement along the primary supply OR the primary demand curve, holding all other factors constant. Be sure to identify the direction of any shift (i.e., right or left) AND the impact on quantity and price. Note (1a) is answered as an example so everyone gets it correct (4 points each)

   a. a late frost destroying 50% of the nation’s peach harvest

      Answer: shift the primary supply curve to the left, resulting in a lower quantity and a higher price

   b. a 50 cent coupon reducing the price of bagged lettuce

   c. the adoption of a new corn variety that reduces pesticide (input) costs by 10%

   d. a decrease in the price of a substitute good for beef such as chicken

   e. an increase in the cost of marketing dairy products to consumers

2. As a pumpkin farmer selling at a farmer’s market in a higher income urban area you have noticed that if you lower your price of pumpkins by 10% your sales increase by 5%. Assuming no other factors are changing, is this the optimal pricing decision if your goal is to maximize revenues? Why or why not? (5 points)

3. Given the following equation that we discussed in class representing the demand for pizza, calculate the cross price elasticity of demand for pizza relative to hot dogs AND interpret your elasticity measure. Show all your calculations (including how you derive the quantity of pizza) for full credit (5 points)

   \[ Q_{\text{Pizza}} = 40 - 2.0P_{\text{Pizza}} + 5P_{\text{Hamburgers}} + 2.5P_{\text{Hot Dogs}} + 0.0002 \text{Inc} \]

   Where: \( Q_{\text{Pizza}} \) (Quantity of Pizza)
   \[ P_{\text{Pizza}} \] (Price of Pizza) = $10.00
   \[ P_{\text{Hamburger}} \] (Price of Hamburgers) = $4.00
   \[ P_{\text{Hot Dogs}} \] (Price of Hot Dogs) = $2.00
   \[ \text{Inc} \] (Income) = $25,000
4. As a marketing analyst for a major poultry firm you have been asked to address the impact of the recent economic slow down in the U.S. economy, reduction in real personal incomes, and overall higher food prices on the products developed, promoted, and sold by your company. What would you focus upon? Perhaps discuss some anticipated trends in home vs away from home food consumption, steak vs chicken consumption, and the percentage of income spent on food. Provide sound economic logic to justify your answers. (10 points)

5. You have been asked by the Kentucky Consumer Coalition to address the recent relatively large increase in food prices. Discuss (don’t just list) at least three areas that you would emphasize in your presentation. (10 points)

6. Provide a scenario where the quantity of U.S. beef consumption could actually decline during a given an increase in the consumer demand for beef during the same time frame. (3 points)
7. Fill in the blank (7 points)

The ____________ (primary or derived) demand curve for pork represents how the quantity of pork demanded by consumers responds to __________ changes for pork at the __________ (retail or farm) level, holding all other factors constant.

The ____________ (primary or derived) demand curve for apples represents how the quantity demanded for apples responds to __________ changes for apples at the __________ (retail or farm) level, holding all other factors constant.

The vertical distance between the primary and derived demand curves for eggs represents the total ________________________________ of moving eggs from the farm to the consumer.

8. Multiple Choice: Circle the correct answer. (4 points)

Consumer (retail) prices are determined by the intersection of

a. derived demand and derived supply  
b. primary supply and derived demand  
c. derived supply and primary demand  
d. derived demand and primary demand  
e. none of the above

9. Circle the correct answer in the following table related to factors affecting the elasticity of demand (12 points)

<table>
<thead>
<tr>
<th>Relatively Large or Small Quantity Response for a given Price Change?</th>
<th>More or Less Elastic Demand?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing Number of Substitutable Food Items</td>
<td>LARGE or SMALL</td>
</tr>
<tr>
<td>Higher Proportion of Income Spent on the Food Item</td>
<td>LARGE or SMALL</td>
</tr>
<tr>
<td>Greater Time Period to Adjust to Price Changes</td>
<td>LARGE or SMALL</td>
</tr>
</tbody>
</table>
10. Answer the following questions (10 points)

   a. Define the price elasticity of supply.

   b. Assume the price elasticity of supply for peanuts in the short-run is 0.25. Based on this elasticity, how much of an expected price increase would be necessary to entice peanut growers to increase the quantity supplied by 5%, holding all other factors constant?

   c. Identify two factors that could affect the elasticity of supply for peanuts.

   d. Assume an analysis of the peanut market reveals that the marketing margin for peanuts is 25 cents per pound. What does that mean?

11. Answer the following True/False questions. Circle if the statement is True or False: If False, correct the statement to make it true. (Your best 5 of the following 6 questions will be graded --3 points each)

   a. True or False? A decrease in food processing costs (a marketing input) will shift both the derived supply and the derived demand to the right, causing the marketing margin to decrease, assuming a competitive market.

   b. True or False? If the income elasticity for carrots is less than one, but greater than zero, carrots would be classified as an inferior good.

   c. True or False? Disappearance is a measure of consumption which can be derived by the following expression: beginning stocks + production + imports – exports - ending stocks.

   d. True or False? Policymakers wishing to increase tax revenues will increase taxes on products that have an own price elasticity of demand greater than one in absolute value.

   e. True or False? The price flexibility coefficient for tobacco which has few substitutes would likely be greater than one in absolute value.

   f. True or False? Complementary goods have a negative cross price elasticity.