**Case Study 1: Demand and Supply Analysis and Elasticity**

**(Due Date: September 24, 2020)**

**Please carefully read the following passage and answer the questions mentioned below:**

1. Aaron Hank is a star hitter for the Bay City baseball team. He is close to breaking the major league record for home runs hit during one season, and it is widely anticipated that in the next game he will break that record. As a result, tickets for the team’s next game have been a hot commodity. But today it is announced that, due to a knee injury, he will not in fact play in the team’s next game. Assume that season ticket holders are able to resell their tickets if they wish. Use supply and demand diagrams to explain the following.
2. Show the case in which this announcement results in a lower equilibrium price and a lower equilibrium quantity than before the announcement. [**Hint:** you should shift both demand and supply curves. You need to figure out which curve will shift more than the other to give you the desired result. Please note that supply will change as they can resell the tickets] **(10 points)**
3. Show the case in which this announcement results in a lower equilibrium price and a higher equilibrium quantity than before the announcement. [**Hint:** you should shift both demand and supply curves] **(10 points)**

**2**. Use a diagram to illustrate how each of the following events affects the equilibrium price and quantity of pizza. **(10 points each)**

a. The price of mozzarella cheese rises.

b. The health hazards of hamburgers are widely publicized.

c. The incomes of consumers rise, and pizza is an inferior good.

**3**. Calculate the equilibrium price and quantity from the following demand and supply equations (**you are not required to graph the equations**): **(20 points)**

= 10 – 2P (Demand Equation) and = 2 + 2P (Supply Equation)

**4**. In the United States, 2015 was a bad year for growing wheat. And as wheat supply decreased, the price of wheat rose dramatically, leading to a lower quantity demanded (a movement along the demand curve). The following table describes what happened to prices and quantity of wheat demanded. **(10 points each)**

|  |  |  |
| --- | --- | --- |
|  | **2014** | **2015** |
| **Quantity Demanded (bushels)** | 2.2 billion | 2.0 billion |
| **Price (per bushel)** | $3.42 | $4.26 |

1. Using the midpoint method, calculate price elasticity of demand for wheat. Mention what type of price elasticity of demand it is. **(Hint: assume that 2015 is the end point or the new price and quantity demanded)**
2. What is the total revenue for the U.S. wheat farmers in 2014 and 2015?
3. Did the bad harvest increase or decrease the total revenue of the U.S. wheat farmers? How could you have predicted this from your answer to part a?