Economics 101 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Spring 2020

Quiz #5 with answers

3/5/2020 TA/Discussion Section Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_

All quizzes will be graded on a 10 point scale: you will get two points simply by being on time to class and putting your name on the quiz for that day. The remaining eight points are based upon your answers to the quiz questions.

1. Consider the demand for bananas that is given by the following equation where P is the price per unit of bananas and Q is the number of units of bananas:

Demand for Bananas: P = 10 – 2Q

a. (2 points) In the space below write the general equation for the arc price elasticity of demand using the standard symbols we used in class.

b. (2 points) Suppose the price of bananas increases from $2 per unit to $4 per unit. Given this demand curve calculate the price elasticity of demand between these two points. Use the arc elasticity measure to calculate this elasticity. Show your work to get full credit. It is fine to leave your answer as an improper fraction.

c. (2 points) Interpret the price elasticity of demand number you got in answer (b): is demand elastic or inelastic between these two points? What does it mean for demand to be inelastic or demand to be elastic?

2. (2 points) You are told that the cross price elasticity of demand of good X for good Y is equal to 2. What does this numeric measure tell you about the relationship between Good X and Good Y?