Economics 411 Exam 2 Answer all the questions below:

Answer all the following questions below. Please begin each question on a new sheet of paper. Please type all answers to questions which require a written response. Please circle all quantitative answers.

1. If a firm targets 50 percent rate of return on sales, and has unit costs of production of $200, what price should it charge if it uses cost-plus pricing? What important economic considerations does cost-plus pricing ignore?

2. A firm has segmented its market into the following demand functions:

$Q1 = 500 - 10P1$ $Q2 = 500 - 5P2$ with a cost function: $MC=AC=20$

a. Determine the profit maximizing price and quantity and corresponding economic profits if the firm charges one price.
b. Determine the profit maximizing prices and quantities and corresponding economic profits if the firm practices 3rd degree price discrimination
c. Determine the potential two-part tariff that the firm could charge if there were homogenous demands.
d. Determine the limit price and quantity if the firm wanted to preclude all entry into the market.
e. Determine the optimal price, quantity and corresponding economic profit if the market were purely competitive.

3. Use a demand-supply diagram to show how consumer borne and producer borne transaction costs affect consumers' and producers' surplus. Label your diagram correctly and briefly discuss the economic meaning of such costs.

4. Discuss the advantages and disadvantages of the demand estimation techniques discussed in your textbook. Which technique do economists typically prefer? Why?

5. Use the demand function to answer the questions below:

$Qx = 200 - 4Px + 4Py -- 5Pz + 5I$

Assume initial values of $Px = 5$, $Py = 10$, $Pz = 4$, $I = 20$

a. Determine the quantity of X that will be sold.

b.-c. Develop the corresponding Total Revenue and Marginal Revenue Functions.

d. Determine the quantity and price that maximize revenue.

e. Determine the price elasticity of demand in the range Px = 5-20.

f. Determine the cross elasticity of demand between Qx and Py for the range Py of 10-20. What is the relationship between goods X and Y?

g. Determine the income elasticity of demand in the income range 100-500.

h. Determine the cross elasticity of demand between Qx and Pz in the price range of Pz of 4-10. What is the relationship between goods X and Z?

i. Based on your answers above what type of good does X appear to be? Why?