Quiz 5 – Microeconomics – EC 2106 Name:_______________________________

Spring Semester 2000

Instructor: Robert McNab Score:_____________

<u>INSTRUCTIONS:</u> Read each question carefully. Use the back of the quiz for extended answers.

Assumption 1: Assume that gasoline is a <u>normal good</u> and that the market for gasoline in Atlanta is in equilibrium and that the average price of gasoline in Atlanta is $1.30 a gallon with a quantity of 12.5 million gallons demanded weekly.

1. Using Assumption 1, illustrate the potential impact on market price and quantity, assuming all else remained equal, if the costs of refining petroleum into gasoline decreased and consumer income increased? Assume that the increase in consumer income was greater than the increase in costs of refining. 2 points

Assumption 2: Assume that Frank's video store operates in a perfectly competitive market. Frank can rent 50 videos a day at $2 a video. On average, it costs Frank $1.75 to rent a video, of which $1.25 is variable costs and $0.50 is fixed costs.

2. Calculate Total Revenue, Total Costs, and Total Profit (or Loss) for Frank's video store. Based upon your answer, will firms enter the market, exit the market, or is the market in equilibrium? 3 points

3. Illustrate, using Assumption 2, the market and Frank's firm. Assume that 5000 videos are rented daily in the market. Ensure that you label all the cost and market curves. 3 points

1. Two effects are occurring in the market. First, the increase in consumer income results in an increase in market demand. Second, the decrease in refining costs translates into an increase in market supply. Since we have assumed that the increase in income was greater than the decrease in refining costs, this means that the resulting increase in demand is greater than the resulting increase in supply. This means that we can definitely say that market price and quantity will both increase.

2. Total Revenue = P * Q, Total Cost = ATC * Q, Profit = TR – TC

Total Revenue	= 2 * 50 = 1000
Total Cost	= 1.75 * 50 = 87.50
Profit	= 12.50

3. Graph a perfectly competitive firm as illustrated in class and in the lecture notes