

Quiz 10

Microeconomics - EC 2106

Fall Semester 1999

Instructor: Robert McNab

Name: _____

Score: _____

INSTRUCTIONS: Read each question carefully before answering the question. For multiple choice and true/false questions, please choose the most accurate answer. For questions requiring you to show your work, ensure to include sufficient detail to receive full or partial credit. You will have 10 minutes to complete this 10-point quiz.

1. Assume that Frank's video store has come to dominate the small town of Rome, GA and has convinced the city council to prohibit the rental of videos at any location other than Frank's video store. Within which type of industry does Frank's video store operate? 1 point

2. Currently, Frank's video store rents 15,000 videos per month at a price of \$3.50 per video. At this quantity, the Marginal Cost of selling the last unit of production is equal to \$0.15 and the Average Total Cost is equal to \$1.00. Using this information, illustrate the current market for video rental and calculate total revenues, total costs, and total profit (or loss). 5 points

3. Assume that Frank raises the price of a video rental to \$4.00 per video and quantity demanded declines to 14,000 videos rent per month. What is the price elasticity of demand for video rentals? Assuming all else remains equal, if Frank raised price to \$4.50, would total revenue increase or decrease? 4 points

1. Monopoly
2. Illustrate monopolist making profit. $TR = P * Q = 3.5 * 15000$, $TC = ATC * Q = 1 * 15000$
3. $Ed = | ((Q_n - Q_o) / (Q_n + Q_o) / 2) / ((P_n - P_o) / (P_n + P_o) / 2) |$
 $= | ((14000 - 15000) / (14000 + 15000) / 2) / ((4 - 3.5) / (4 + 3.5) / 2) |$
 $= | (-1000 / 14500) / (.5 / 3.75) |$
 $= | -.069 / .1333 |$
 $= .52$

Since $Ed < 1$, if P is raised, TR will increase, all else remaining equal