

UNIVERSITY OF WISCONSIN

Economics 101 – Spring 2007

Professor Brown

Problem Set 5

NOT GRADED, Complete before Midterm Exam February 27th, 2007

1. Are the following curves likely to be price elastic or price inelastic?
 - a. Demand for snack food at the only snack food stand in the movie theater
 - b. Short-run supply of high-rise buildings
 - c. The supply of music downloads
 - d. Demand for kidney transplants by patients with kidney failure
 - e. Demand for gas at one of three gas stations on a block

2. Are the following cross-price elasticities more likely to be negative, positive or approximately zero?
 - a. The cross-price elasticity of demand for restaurant meals with respect to the price of movie tickets
 - b. The cross price elasticity of demand for movie tickets with respect to the price of DVD rentals.

3. Consider the demand curve for widgets, $Q_d = 80 - 4P$.
 - a. Find the price and quantity at which the price elasticity of demand is equal to -1 (unit elastic).
 - b. Suppose you are a producer of widgets and you are currently selling them for \$6. You are thinking of increasing the price to \$10.
 - (i) Using the midpoint method, what is the elasticity of demand between the prices of \$6 and \$10?
 - (ii) If you want to maximize your revenue, does the elasticity of demand imply that you should increase your price or not? What price maximizes total revenue?