

Problem Set 1

Due Lecture 2 in class on paper

For this and all future problem sets, questions are from the “Problems” section of the questions at the end of the chapter.

1. GLS Chapter 2, Question 8

2. Market Equilibrium

Suppose that the supply of Epi-pens is represented by $Q_S = 25P$, and that the demand for Epi-pens is represented by $Q_D = 10,000 - 25P$.

(a) What is the current equilibrium price and quantity?

(b) Suppose that a generic producer enters the market and produces an addition 1,000 Epi-pens. What is the new supply curve (assuming that the generic and the brand name are perfect substitutes)?

(c) Without doing any algebra, what do you anticipate should happen to price and quantity after the introduction of the generic alternative? Draw a diagram to illustrate what is going on.

(d) What is the new equilibrium price and quantity?

3. Elasticity

(a) Suppose that house prices increase by 10%, and the total quantity of homes in the market increases by 6%. What is the elasticity of supply of housing? Interpret your answer in the context of a 1% change in home prices.

(b) There is substantial disagreement in the economics profession about the exact magnitude of the housing supply elasticity (note that this is critically important in the policy discussion about rising home prices). One seminal article (Topel and Rosen, 1988) estimates that the elasticity is 1.0 for a one-year change in prices, and 1.7 for an eight-year change in prices. Interpret each elasticity in light of a 1% change in home prices, and give some intuition about why the 8-year elasticity is larger than the one-year elasticity.

4. Give two recent examples of (i) when you have moved along the demand curve and (ii) when your personal demand curve has shifted. Briefly explain why each behavior is a shift

or a move along the curve.

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If you would like additional practice, I suggest working through question 13 (answers in the back of the book).