Supply and Demand: Elasticity
Short-Answer, Essays, and Problems

1. A gasoline station, near a professional football stadium, parks cars on its lot to make money on game days. Last year it charged $4.00 per car and parked 1,000 cars. This year it raised the parking price to $5.00 and parked 850 cars. Did the station owner make a good economic decision in raising the parking prices from one year to the next? Explain.

D is inelastic for parking, so as price increases, TR increases too: $4250 > $4000. Work less, make more. Good.

2. The president of the Micro Brewing Corporation asks you, as the company economist, to forecast changes in consumer beer purchases associated with a proposed price change. You conduct a survey and find that if the price of a six-pack increases from $5.50 to $7.50, the quantity demanded will decrease from 2,200 units to 1,800 units a month. Should the Micro Brewing Corporation raise its price? Explain the economic basis for this recommendation to the president.

For some reason, perhaps the brews are unique, D is inelastic for this brewery’s beer, so as price increases, TR increases too: 12,100 < 13,500. Sell less, make more. Good.

3. In 1990 the US government imposed a 10% tax on certain luxuries such as pleasure boats. Sales of pleasure boats fell by nearly 90% in southern Florida as prospective buyers bought boats in the Bahamas to avoid paying the tax. What does this imply about the size of the elasticity of demand?

Demand for pleasure boats is highly elastic because there was a cheaper substitute in the Bahamas, just across the Gulf Stream from Miami.

4. The owner of a health club asks you for advice about whether the company should raise the price of its membership this year based on the following information: last year the club raised the price of its membership by 5% and the number of members paying the same fee fell by 7%.

Don’t do it! D is Elastic, and the price increase has already cost them too many customers and too much revenue.

5. The Metropolitan Transit System recently announced a 50% increase in the price of a transit ticket. The administrators said that they needed an increase in revenue to cover their rising costs. Explain the economic rationale for this decision.

The MTA believes there are few practical substitutes for public transit and that the price of a ticket or pass is a small part of income. Therefore higher prices will not chase many customers away. TR should increase to cover costs.

6. Ford Motor Company announced a major rebate program for its cars and trucks. The rebate program amounts to a simple reduction in price. The company executives hope to increase revenue as a result of this rebate program. What economic explanation would justify this decision?

Ford believes the demand for its cars is elastic and a price reduction will bring in so many customers that TR will increase.

7. The president of a toy company asks you for advice about whether the company should cut the price of its best-selling doll this year based on the following information: last year the company cut the price of its best-selling doll by 10% and the total revenues from doll sales increased by 10%.

When price declines and TR increases, the D is elastic, but as price declines, D becomes less elastic. Therefore next year, a price decrease will increase TR, but by less than last year’s increase.