

Economics 110-007
 Homework for Chapter 4
Late work will not be accepted.

1. The demand schedule for sugar is:

Price (\$ per pound)	Quantity Demanded (millions per pound)
5	25
10	20
15	15
20	10
25	5

- What happens to total revenue if the price of sugar rises from \$5 to \$15 per pound?
- What happens to total revenue if the price rises from \$15 to \$25 per pound?
- At what price is total revenue at a maximum? Use the total revenue test to answer this question.
- At an average price of \$20 a pound, is the demand for sugar elastic or inelastic? Use the total revenue test to answer this question.

2. Fill in values for each price-quantity combination listed in the following table. What relationship have you depicted?

P	Q	Price Elasticity	Total Revenue
\$10	2	~~~~~	
9	3		
8	4		
7	5		
6	6		
5	7		
4	8		
3	9		
2	10		

3. The table gives the supply schedule for long-distance phone calls:

Price (cents per minute)	Quantity supplied (millions of minutes/day)
10	200
20	400
30	600
40	800

Calculate the elasticity of supply when

- a) The price falls from 40 cents to 30 cents a minute.
 - b) The average price is 20 cents a minute.
4. (Difficult) The income elasticity for alcoholic beverages is 0.62. Consider two people with incomes of \$20,000 and \$40,000. If the percentage change in the quantity demanded is 30% for each of them, how much will their income need to change by, respectively? Why might some think this is unfair?