

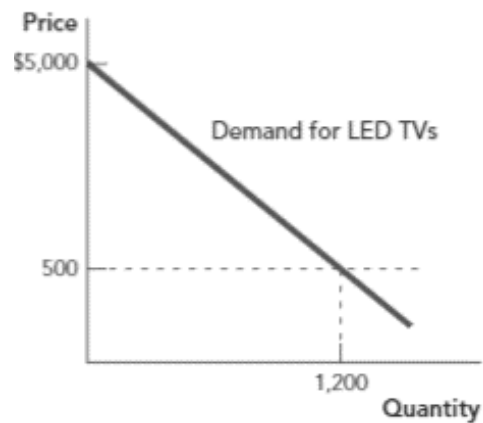
## Lecture Assignment 2

### 1. Demand

- a. When the price of Apple MacBooks goes down, what probably happens to the demand for laptops featuring Microsoft Windows?
- b. When the price of petroleum goes up, what probably happens to the demand for natural gas? To the demand for coal? To the demand for solar power?
- c. If everyone thinks that the price of tomatoes will go up next week, what is likely to happen to demand for tomatoes today?

### 2. The demand for LED TVs.

- a. If the price for a 60-inch LED TV is \$500, and Newhart would be willing to pay \$3,000, what is Newhart's consumer surplus?
- b. Consider the following figure for the total demand for LED TVs. At \$500 per TV, 1,200 TVs were demanded. What would be the total consumer surplus?



## **Solution**

### **1.**

a. The demand for laptops featuring Microsoft Windows probably falls—remember that this means the entire demand curve shifts down and to the left. The demand for laptops featuring Microsoft Windows falls when the price of MacBooks goes down because laptops featuring Microsoft Windows and MacBooks are substitutes. Thus, when the price of MacBooks goes down, people switch to buying more MacBooks and fewer laptops that feature Microsoft Windows at any particular price.

b. When the price of petroleum goes up, the demand for these substitutes also goes up.

c. Today's demand for tomatoes will probably rise, since people see "tomatoes today" and "tomatoes next week" as substitutes.

### **2.**

a.  $\$2,500 = \$3,000 - \$500$

b. Total consumer surplus:  $\$2,700,000$ : It's  $1/2 \times 1,200 \times (\$5,000 - \$500)$ .