EE211 Section 1 Quiz 3 Answers

1. Alexis, Bruno, and Camila each want an ice-cream cone. Alexis is willing to pay \$12, Bruno is willing to pay \$8, and Camila is willing to pay \$4. The market price is \$6. The consumer surplus is
    a. \$6
    b. \$8
    c. \$14
    d. \$18

$$CS = (12-6) + (8-6)$$
$$= 6 + 2 = \$8$$

2. If the price of an ice-cream cone falls to \$3, the consumer surplus of Alexis, Bruno, and Camila increases by ____________________.

$$CS_{new} - CS_{old} = \$7$$

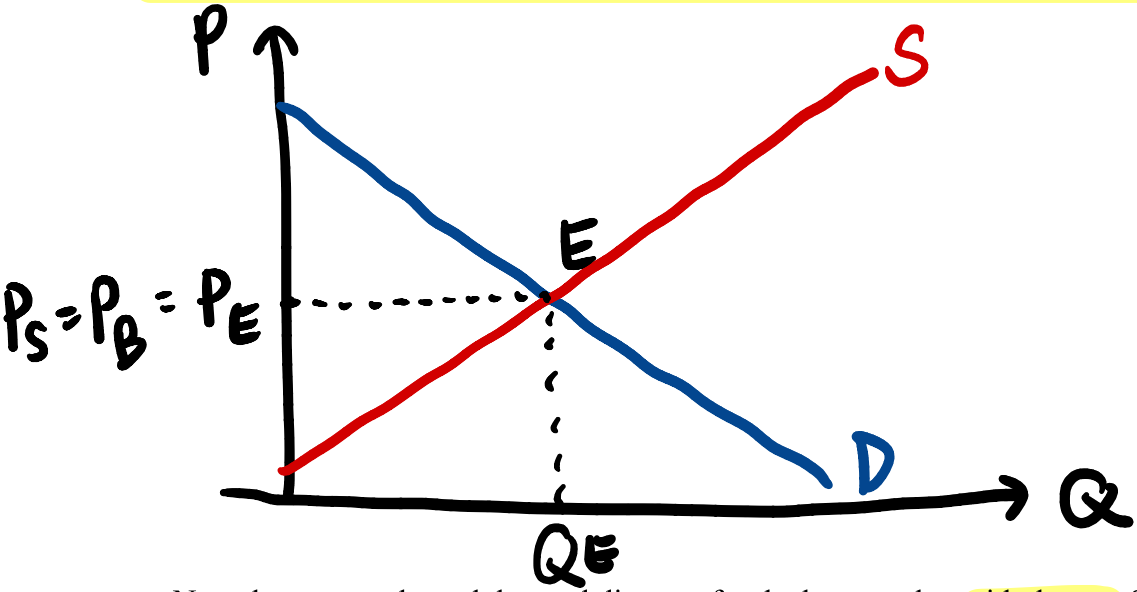
$$CS_{new} = (12-3) + (8-3) + (4-3)$$
$$= 9 + 5 + 1 = \$15$$

3. Diego, Emi, and Finn are available to work as tutors for the semester. The opportunity cost of tutoring is \$400 for Diego, \$200 for Emi, and \$100 for Finn. The university is hiring tutors at a price of \$300. Producer surplus in this market is
    a. \$100.
    b. \$200.
    c. \$300.
    d. \$400.

$$PS = (300-100) + (300-200)$$
$$= 200 + 100 = 300$$

Suppose the federal government requires beer drinkers to pay a $1 tax on each case of beer purchased. (In fact, both the federal and state governments impose beer taxes of some sort.)

Draw a supply-and-demand diagram of the market for beer without the tax. Show the price paid by consumers, the price received by producers, and the quantity of beer sold. What is the difference between the price paid by consumer and the price received by producers?



Now draw a supply-and demand diagram for the beer market with the tax. Show the price paid by consumers, the price received by producers, and the quantity of beer sold. What is the difference between the price paid by consumer and the price received by producers? Has the quantity of beer sold increased or decreased?