

1. a. Opportunity cost is what you must give up to get something else. It is the ‘next best alternative.’

b. The opportunity cost of you attending college is the wages or salary you could have made if you had gone straight into the workforce from high school. If you mentioned the cost of tuition, room & board and related it to what your parents had to give up, that would also be a correct answer, although it is their opportunity cost and not yours.

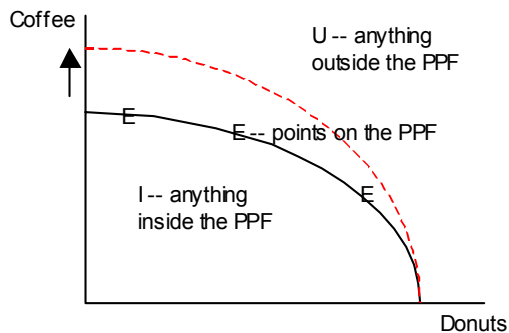
2. a. **False.** Economics is the study of how **fairly** goods and services are distributed within society.

b. **False.** **Efficiency** refers to the size of the economic pie, and **equity** refers to how the pie is divided.

c. **True.**

3. The two “loops” in the Circular Flow Diagram represent the flow of Goods & Services and the flow of Monetary Payments for these G & S.

4. The PPF below shows the production possibilities for Coffee and Donuts.



a. Efficient points are along the PPF.

b. Inefficient points are inside the PPF.

c. Unattainable points are outside of the PPF.

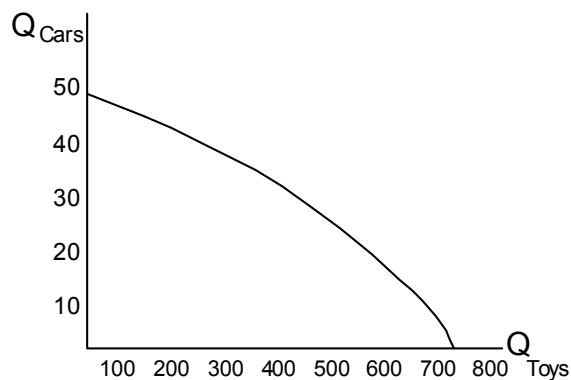
d. The red dashed PPF shows a case where the weather for growing coffee beans is perfect. This would increase the amount of coffee that could be grown at any point, but would NOT change the maximum quantity of donuts that could be produced.

5. The table below show the production possibilities for Toyland. Use the information to answer the questions below.

a. see the graph for the PPF.

b. When Toyland increases the production of cars from 10 to 20, they must give up **100 Toys**.

c. When Toyland increases the production of cars from 30 to 40 they must give up **200 Toys**.



d. Toyland exhibits **increasing opportunity costs**. They must give up an increasing number of Toys to make larger and larger amounts of Cars. When they had only small production of cars, they must give up 100 toys, but double that number when they are producing a large number of cars.

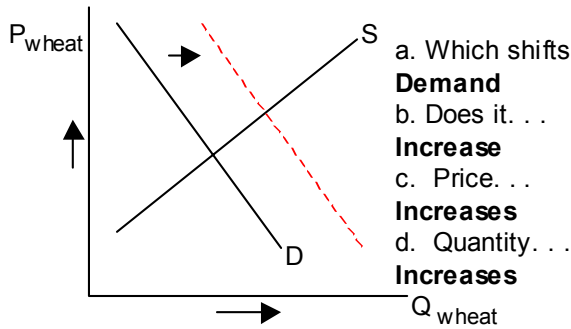
6. a. **Positive** This is fact. . .remember Experiment 5—The Minimum Wage?
- b. **Normative** The phrase “worse for society” is normative, in that some could argue that inflation is worse.
- c. **Positive** This is also a fact. . .when it is more costly to borrow, there will be less investment.

7. a. The five factors that influence demand are: Price of the good, Income, Prices of related goods, Tastes and Expectations.

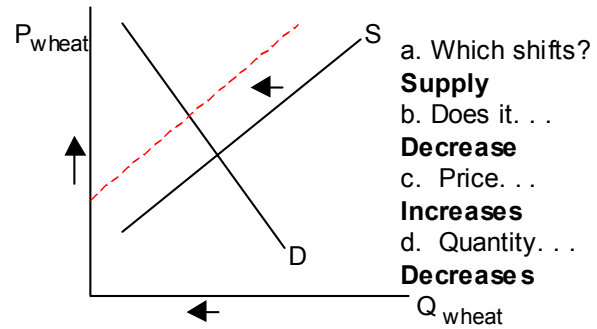
b. The four factors that influence supply are: Price of the good, Input prices, Technology, and Expectations of the future.

8.

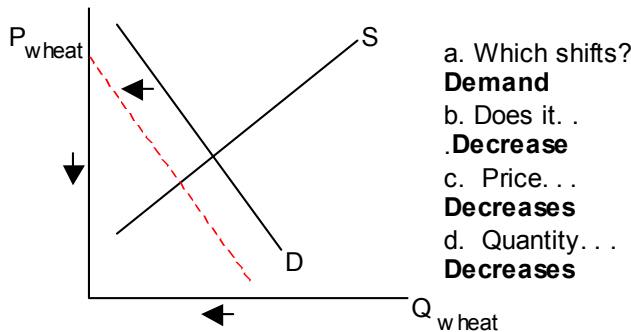
a. Consumer incomes rise. wheat farmers falls, ceteris paribus.



b. Cost of fertilizer increases and c. Number of



d. Science determines that eating wheat causes high blood pressure.



9. Given the graph which shows the equilibrium price at \$3

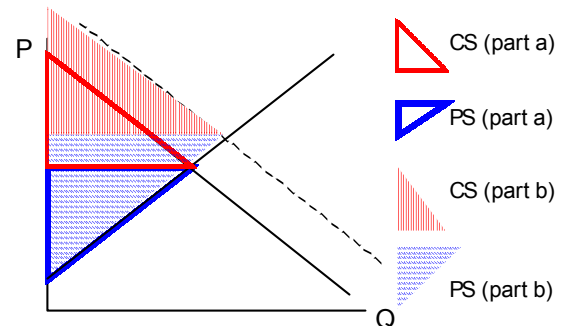
a. At **prices greater than \$3** a surplus will exist. Quantity supplied will be larger than quantity demanded.

b. At **prices less than \$3** a shortage will exist. Quantity demanded will be larger than quantity supplied.

10. a. See graph. There is **no** deadweight loss.

b. See graph.

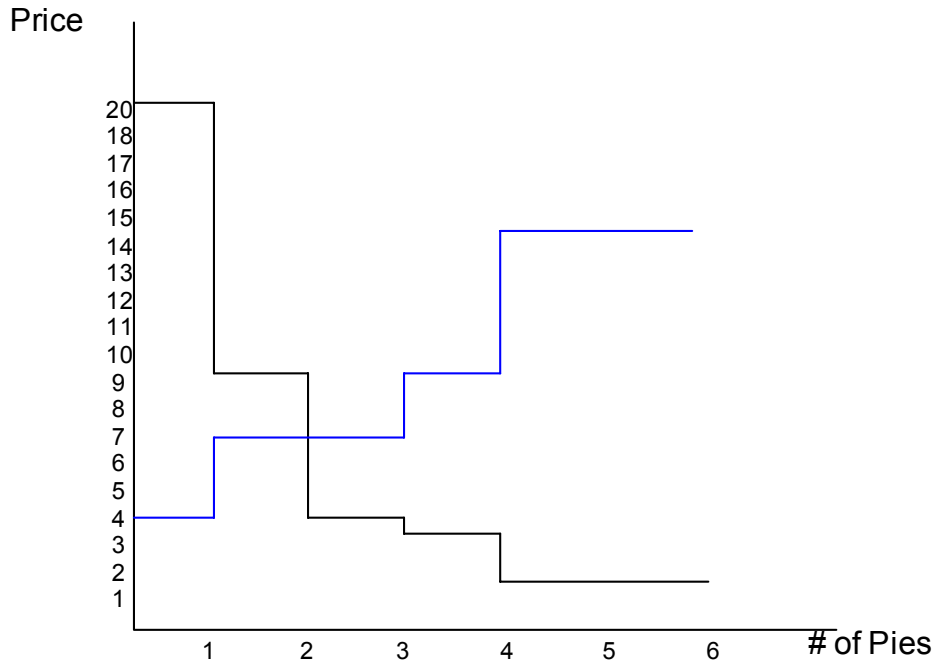
c. Producer surplus **increases**.



11. a. The demand schedule would be the following:

If the price is \$20 a piece, only one person will eat the pizza.

\$9	two people
\$4	three people
\$3	four people
\$1.50	six people



b. If these students could find pizzas for \$3 each, **four** pizzas are sold, one each to **David, Mary, Sam & Angie**. Their total **consumer surplus** is $[(20-3) + (9-3) + (4-3) + (3-3)] = 24$

c. The supply schedule is the following:

If the price is \$4 only one pizza will be supplied

7	three
9	four
15	six

d. The equilibrium price of pizza is \$7 and **2 pizzas** are sold.

e. In equilibrium, **Pizza Hut and Papa John's** each sell one pizza.

f. The total amount of **producer surplus** is \$3 = $[(7-4) + (7-7)]$

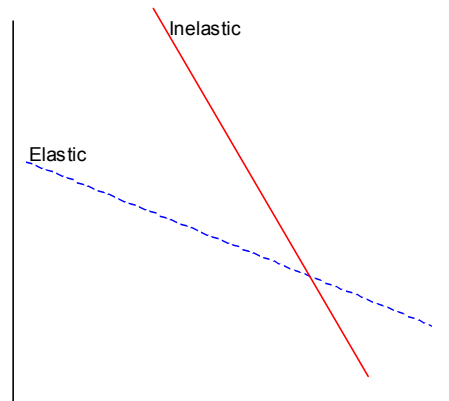
$$\text{Price elasticity of demand} = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$$

12. a.

$$= \frac{(Q_2 - Q_1)(P_2 + P_1)}{(Q_2 + Q_1)(P_2 - P_1)}$$

b. A good has an inelastic demand when its price elasticity of demand is less than one.

c.



d. Budweiser would have the more elastic demand, as it is a more narrowly defined good than 'beer'. If the price of Bud were to change, even a small amount, you would see much greater changes in quantity demanded as people would switch to whichever beer were on sale.

$$13. a. \text{Price elasticity} = \frac{\frac{24 - 20}{(24 + 20)/2}}{\frac{20 - 40}{(20 + 40)/2}} = \frac{4 * 60}{44 * (-20)} = \frac{3}{11}$$

$$b. \text{Income elasticity} = \frac{\frac{26 - 16}{(26 + 16)/2}}{\frac{60,000 - 50,000}{(60,000 + 50,000)/2}} = \frac{10 * 110,000}{42 * 10,000} = \frac{55}{21}$$

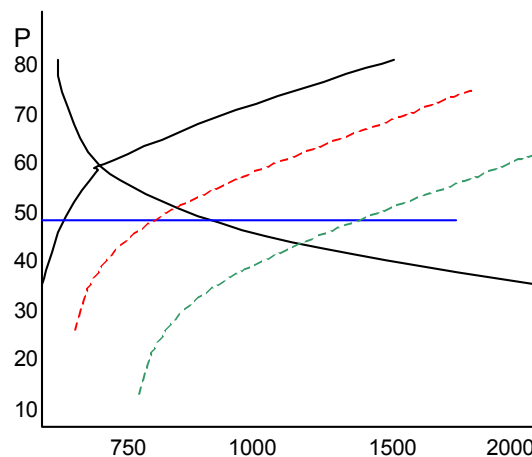
c. This is good a normal good, as the income elasticity is positive.

14. If a good has an inelastic demand, you should **increase price** to increase total revenue.

15. a. The market price is **\$60** and **600 textbooks** are sold.

b. Is this a **price ceiling** since the college would not allow prices to rise above the ceiling.

c. **Three hundred textbooks** will be sold with the price ceiling at \$50. This is the quantity supplied at \$50. Note that there will be a large shortage of textbooks at this price!



c. The automated publishing and e-books **decreases the cost of textbook production** meaning that supply will increase. This will increase the quantity of textbooks sold. Its effect on price is more ambiguous. Normally, the increase in supply would lower the price. This will only happen IF the change in supply is large enough (green dashed line). Otherwise, the price will stay at the \$50 price ceiling and the shortage of textbooks will lessen (red dashed line).