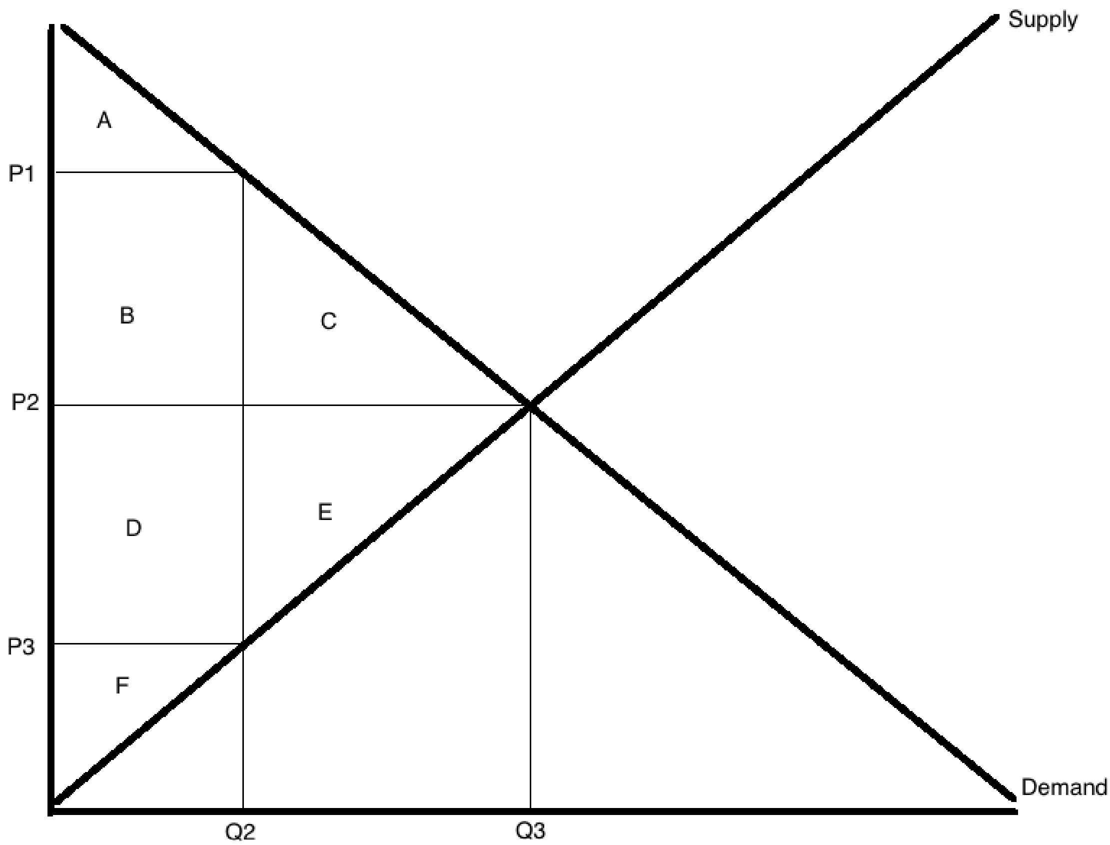
Campus Academic Resource Program

Surplus and Price Setting Handout

Surplus and Price Setting Practice Problems

Work on the following practice problems to help improve your understanding. Following the problems is an answer key.

Figure 1



For Questions 1-8, refer to Figure 1.

1. Which price in Figure 1 would be used to create a price floor?

    A. P1
    B. Q2
    C. P3
    D. P2

2. Which price in Figure 1 would be used to create a price ceiling?

   A. P1
   B. Q2
   C. P3
   D. P2

3. What is the consumer's surplus if the market is in equilibrium?

   A. A+B+C
   B. F+D+E
   C. C+E
   D. A+B
   E. D+F

4. What is the producer's surplus if the market is in equilibrium?

   A. A+B+C
   B. F+D+E
   C. C+E
   D. A+B
   E. D+F

5. What is the consumer's surplus if a price floor at P1 is in place?

   A. A
   B. B
   C. C
   D. D
   E. E
   F. F

6. What is the producer's surplus if a price floor at P1 is in place?

   A. A+B
   B. C
   C. B
   D. A+B+D
   E. A
   F. F+D+B

7. What is the consumer's surplus if a price ceiling at P3 is in place?

   A. A+B
   B. C
   C. B
   D. A+B+D
   E. A
   F. F+D+B

8. What is the producer's surplus if a price ceiling at P3 is in place?

   A. A+B
   B. C
   C. F
   D. A+B+D
   E. A
   F. F+D+B

9. If a price floor or price setting is put in place, what is the economic loss called?

10. Describe consumer surplus.

11. Distinguish between efficiency and equality.

12. Why does a government institute a price floor or price ceiling?

13. Give a real life example of a price floor and a price ceiling.

Answers to Practice Problems

1. A
2. C
3. A
4. B
5. A
6. F
7. D
8. C

9. Deadweight Loss

10. Consumer surplus is the marginal benefit experienced by consumers. This occurs when a good or service has a market price that is below what the consumer is willing to pay. The difference in what the consumer is willing to pay and what they will have to pay is the consumer's surplus.

11. Efficiency occurs when a market is operating at its peak capacity— that is, the greatest possible amount of surplus is being generated. Equality refers to a market that is providing the greatest benefit to the most people.

12. A government may decide that, for a given good or service, equality is more important than efficiency. A more equal market may generate more benefit for more people, but it may reduce the total amount of surplus that is generated. In the cases when the government decides that it is better to have more people with more benefit, it will institute a price floor or price ceiling.

13. Examples of Price Floors:
    - Minimum Wage
    - Certain food prices in Europe
    - Alcohol and Tobacco (the price floor is established through taxes)
    - Corn in the United States (the price floor is established through subsidies)

    Examples of Price Ceilings:
    - Rent controlled apartments
    - Utility (such as water and electricity) prices
    - Homeowner's insurance rates in Florida
    - Food prices in Venezuela
    - Interest rates in many states

    There are more real life examples.