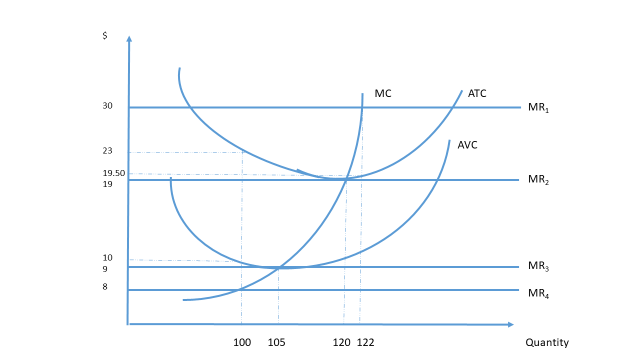
**Profit Maximization in Competitive Markets**

**Questions and Problems**

**Questions:**

Use Figure 1 to answer questions 1-6

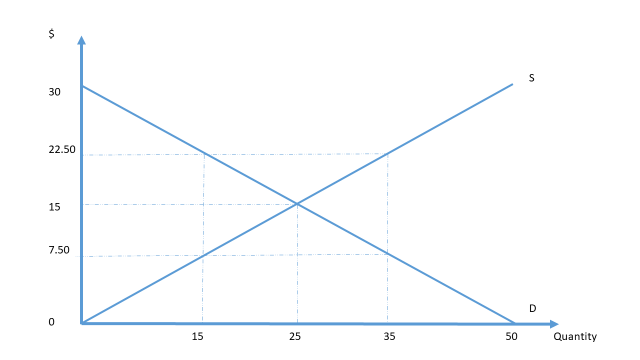
Figure 1



1. In what price range will this firm make a positive profit?
2. In what price range will this firm operate at a loss?
3. In what price range will this firm shut down in the short run?
4. If the market price is $8, what will this firm’s output and profit or loss be?
5. If this firm is representative of all firms in the industry, what will the long-run price be?
6. Assume the market price is $30.
   1. What will the firm’s output be?
   2. What will the firm’s revenues be?
   3. What will the firm’s costs be?
   4. What will the firm’s profit be?
   5. In the long run, what is most likely to happen in this industry?

Use Figure 2 to answer questions 7 - 9

Figure 2



1. In competitive equilibrium, what is
   1. Consumer surplus?
   2. Producer surplus?
   3. Total economic surplus?

1. Assume a price floor of $22.50 is imposed. What is
   1. Output?
   2. Consumer surplus?
   3. Producer surplus?
   4. Deadweight loss?
2. If a price ceiling of $7.50 is imposed,
   1. Will there be a surplus or a shortage?
   2. Describe the transfer of surplus.
   3. How much surplus is transferred?
   4. Is society better off or worse off?

**Answers:**

1. $19 - $30
2. $9 - $19
3. Below $9
4. q = 0; losses equal fixed cost, $1300 [AFC is $23-$10; FC is $13 x 100]
5. $19
   1. 122
   2. $3660
   3. $2379
   4. $1281
   5. New firms will enter
   6. $187.50
   7. $187.50
   8. $375
   9. 15
   10. $56.25
   11. $281.25
   12. $75
6. 1. Shortage
   2. Some of the equilibrium producer surplus is transferred to consumers.
   3. $112.50
   4. Worse off: there is a deadweight loss of $75