Week #7 Worksheet Solutions – Perfect Competition ~ SR & LR Analyses

1. In the case of perfect competition, which of the following is true?
   - **a.** Profit maximization occurs at the level of output where P = MC.
   - **b.** Price always equals average revenue.
   - **c.** Profit maximization occurs at the level of output where MR = MC.
   - **d.** All of the above.

2. When price exceeds marginal cost, a profit-maximizing producer will
   - **a.** increase production.
   - **b.** decrease production.
   - **c.** leave the level of output unchanged.
   - **d.** lower price and increase production.

3. Assume that a competitive firm has the following cost and revenue characteristics at its current level of output: average revenue = $8.00, average variable cost = $6.00, and average fixed cost = $4.00. This firm is
   - **a.** realizing an economic profit of $2.00 per unit.
   - **b.** incurring a loss per unit of $2.00, but should continue to operate in the short run.
   - **c.** incurring a loss of $2.00 per unit and should shut down.
   - **d.** realizing only a normal profit.

4. Farmer Brown sells oats in a competitive market. This year, he decides to increase his supply by 200%. Because of this decision and the resulting increase in supply, the price of oats will
   - **a.** go down.
   - **b.** go up.
   - **c.** Either (a) or (b).
   - **d.** be unaffected.

5. The table below shows the cost of production for upholstery fabric produced by Thomas Textiles. The fabric is sold in a perfectly competitive market.

Output (yards per day)	AVC (dollars per yard)	AC (dollars per yard)	MC (dollars per yard)
1	24	84	24
2	18	48	12
3	14	34	6
4	13	28	10
5	14	26	18
6	16	26	26

If the market price of fabric is $26 per year and the firm maximizes profit, it will

   - **a.** produce 6 yards per day and earn zero economic profit per day.
   - **b.** produce 5 yards per day and earn economic profit of $10 per day.
   - **c.** shut down.
   - **d.** produce 6 yards per day and earn economic profit of $60 per day.

6. The Lambert Lumber Company sells boards in a perfectly competitive market. The marginal cost of boards at the current output of 400 board feet per month is $2. The price of lumber is currently $2 per board foot, and the minimum possible average variable cost of producing lumber is $3 per board foot. If the firm wants to maximize profit, it should
   - **a.** increase monthly output.
   - **b.** continue producing at its current output level.
   - **c.** decrease monthly output.
   - **d.** shut down immediately.

7. In long-run competitive equilibrium, price equals not only _________, but also _________.
   - **a.** average variable costs, marginal cost.
   - **b.** marginal cost, minimum possible average cost
   - **c.** marginal cost, total benefit
   - **d.** the lowest price available to the consumer, total revenues to the firm.

8. The existence of economic profits induces _________from/into an industry, which in turn _________market supply and _________market price.
   - **a.** exiting, decreases, increases
   - **b.** exiting, increases, increases
   - **c.** entry, increases, decreases
   - **d.** entry, increases, increases

9. Assume the T-shirt industry is perfectly competitive. If the industry is in long-run competitive equilibrium, when the market price of T-shirts is $10,
   - **a.** the minimum possible average variable cost of producing T-shirts is $10.
   - **b.** the minimum possible average cost of producing T-shirts is $10.
   - **c.** the marginal cost of producing T-shirts exceeds $10.
   - **d.** new firms will be entering the industry.

10. Suppose the minimum possible average cost of constructing homes is $50 per square foot. As a result of a sharp drop in the demand for home construction, the equilibrium price of home construction falls to $40 per square foot. Assuming the home construction industry is perfectly competitive, in the long run,
    - **a.** the number of firms in the industry will increase.
    - **b.** the number of firms in the industry will remain constant.
    - **c.** firms will leave the industry.
    - **d.** the industry will remain in equilibrium.