Name: ____________________________
Team: ____________________________

FRQ #1

Assume that in a perfectly competitive industry with equilibrium price of $25, a firm has the following characteristics:

Marginal Cost = Average Variable Cost at $20
Marginal Cost = Average Total Cost at $30
Output = 100 Units

a. Draw a graph for the industry and the firm
    i. Label AVC, ATC, MC, and MR
    ii. Label Short-run supply curve
    iii. Label shut down price
    iv. Approximately how much is the total profit or loss? How do you know?
b. With a new set of graphs, explain what you would expect to happen to this industry in the long-run.
    i. Explain what happens to price, quantity, and profit/loss for the firm in the long-run.
    ii. Explain what happens to price and quantity for the industry in the long-run.

FRQ #2: Labor and Production

Assume that a firm produces output using $100 of fixed inputs. The only variable input is labor, which can be obtained at a wage rate of $11. The firm can sell all of the output it produces at a market price of $3.

Number of Employees	Total Product (Quantity)	Marginal Product	Marginal Revenue Product	Marginal Factor Cost
0	0			
1	10			
2	25			
3	35			
4	42			
5	46			
6	48			
7	47			

a) Explain how the law of diminishing marginal returns is demonstrated in this example.
b) Using marginal analysis, identify how many employees this firm should hire? How can you tell?
c) At the level of output identified in part (b), is the firm earning an economic profit or economic loss. How much?