A perfectly competitive firm has the cost curves drawn in the following diagram:

1. If the firm's output sells for $5 per unit:
   a. What is the firm's profit-maximizing output? Why?
   b. What quantity of output does the firm supply on the market? Why?
   c. Calculate the firm's total revenue, short-run total cost, total variable, total fixed cost, and profit.

2. If the firm's output sells for $3 per unit:
   a. What is the firm's profit-maximizing output? Why?
   b. What quantity of output does the firm supply on the market? Why?
   c. Is the firm's profit positive, negative, or zero? Why

3. If the firm's output sells for $2 per unit:
   a. What is the firm's profit-maximizing output? Why?
   b. What quantity of output does the firm supply on the market? Why?
   c. Is the firm's profit positive, negative, or zero? Why