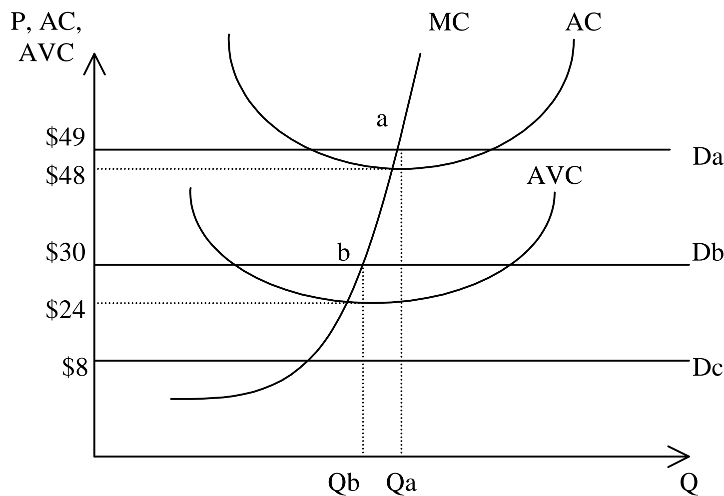
Answers to Questions from Chapter 10

"Test Yourself"

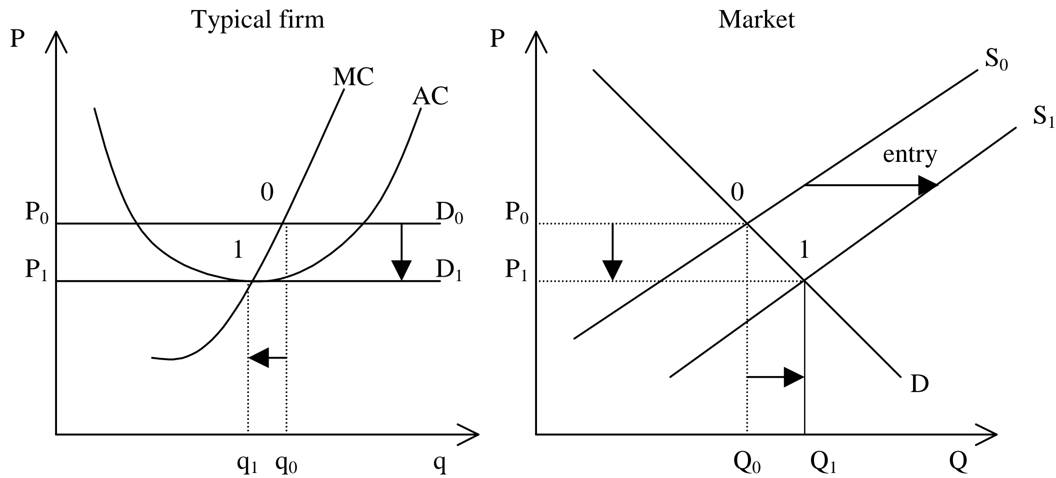
(3) If a firm is earning zero economic profit, the owner's invested capital is earning the same return it could earn in another use. And assuming the owner works in the company, she is earning the same income that she could earn elsewhere. Thus, the owner has no incentive to close the firm.

(4) A firm should remain open in the short run as long as TR ≥ TVC but should plan to close in the long-run if TC > TR. Additionally, a firm should remain open in the short run and the long-run if TR > TC because the firm earns positive profits.



(a) The firm should remain open in the short run and the long run, because it earns a profit of one dollar on every unit (P > AC). It produces the quantity Qa, where P = MC.
(b) The firm should remain open in the short run, because total revenues are greater than total variable costs (i.e., P > AVC). Thus, the firm earns revenue to help pay a portion of its sunk costs. In the long run, when the sunk costs expire, the firm should plan to shut down as total costs are greater than total revenue (i.e., P < AC).
(c) If the price is $8 the firm should shut down immediately. Remaining open will only add to the firms losses, as TR < TVC (i.e., P < AVC).

(5) If the market price in a competitive industry is above its long-run equilibrium price, then the typical firm is earning economic profits in the short run. This encourages the entry of new firms into the industry, increasing the industry supply, and thereby reducing price until profits are zero. In the diagram below, point 0 represents the short run and point 1 reflects the long run.



"Discussion Questions"

(3) a. Many small firms ensure that no firm has a significant impact on market supply by changing its output. Standardized products ensure that customers will not remain with a producer that charges higher prices than its competitors. And perfect information implies that customers know the prices being charged by every producer.

b. Freedom of entry ensures that new firms can easily enter the industry when profits are positive. Perfect information ensures that potential firms know what the profits are in the industry.