PROBLEMS FOR CHAPTER 11

Name: ____________________

LO3 1. In Figure 11.1(b),

(*a*) At what output rate is economic profit equal to zero? ________

(*b*) At what output rate(s) are positive economic profits available? ________

(*c*) At what output rate(s) do economic losses occur? ________

LO2 LO3 2. (*a*) Use the accompanying graph to illustrate the short-run equilibrium of a monopolistically competitive firm.

(*b*) At that equilibrium, what is

(*i*) Price? ________

(*ii*) Output? ________

(*iii*) Total profit? ________

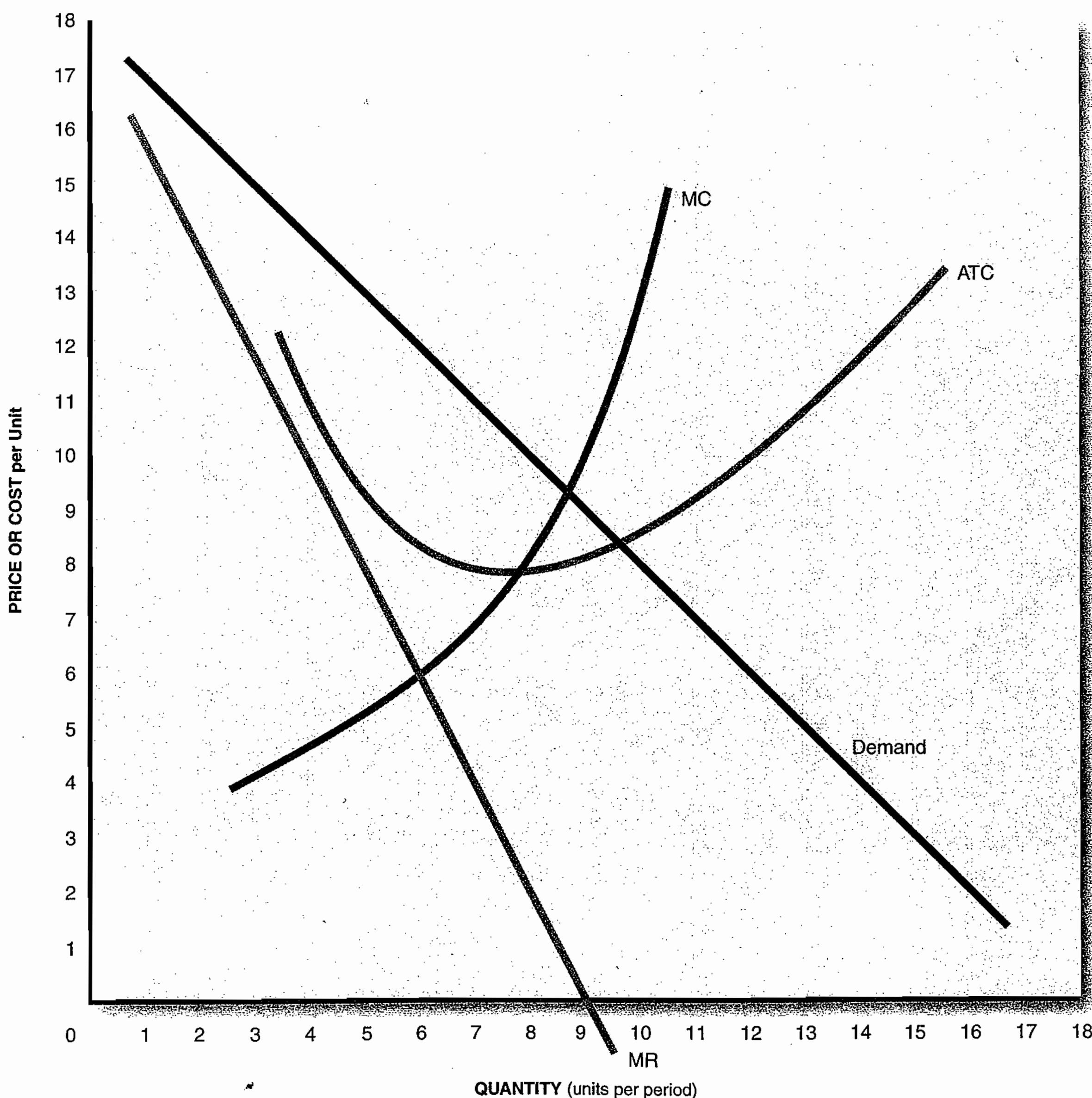
(*c*) Identify the long-run equilibrium of the same firm.

(*d*) In long-run equilibrium, what is (approximately)

(*i*) Price? ________

(*ii*) Output? ________

(*iii*) Total profit? ________



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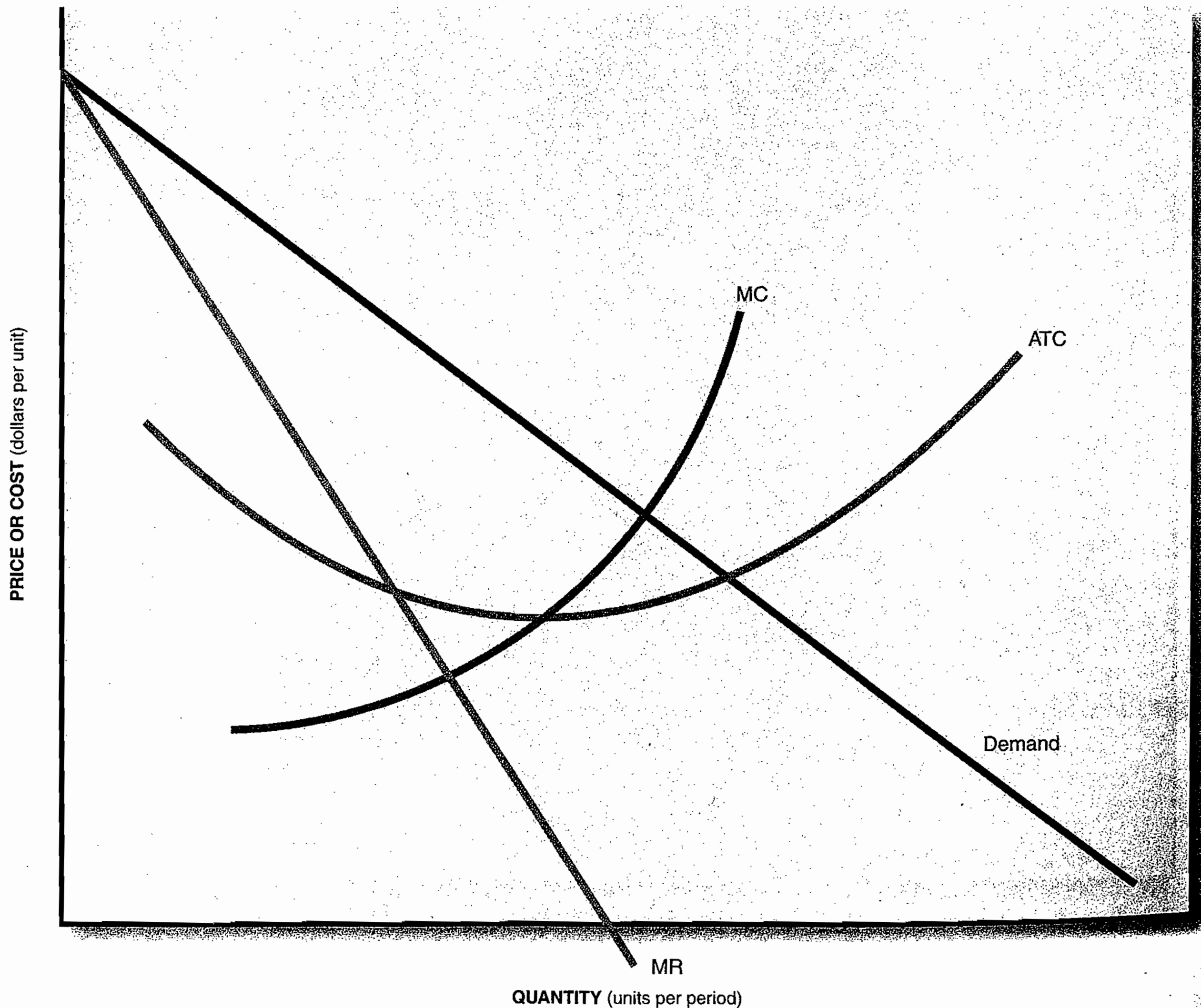
 Name: ______________________

LO2 LO3 3. (*a*) In the *short*-run equilibrium of the previous problem, what is
(*i*) The price of the product? ________
(*ii*) The opportunity cost of producing the last unit? ________
(*b*) In *long*-run equilibrium what is
(*i*) The price of the product? ________
(*ii*) The opportunity cost of producing the last unit? ________

LO2 4. According to the News on page 231,
(*a*) By how much could unit sales at Starbucks decline after the 2006 price increase without reducing total revenue? ________%
(*b*) If the price elasticity of demand for Starbucks is 0.10, by how much would unit sales have fallen? ________%

LO3 5. On the accompanying graph, identify each of the following *market* outcomes:
(*a*) Short-run equilibrium output in competition.
(*b*) Long-run equilibrium output in competition.
(*c*) Long-run equilibrium output in monopoly.
(*d*) Long-run equilibrium output in monopolistic competition.



IN THE NEWS

What's Behind Starbucks' Price Hike?

The Coffee Company Will Raise Drink Prices in October, Even As Other Chains Crowd the Market with Similar (and Cheaper) Products

Starbucks has had a strange spate of troubles this summer—from tepid same-store sales, to a bungled foray into movies, to bad PR on some of its promotions. Such stumbles are entirely atypical of America's favorite coffee shop, and Starbucks (*SBUX*) came up with an unconventional response: It raised its drink prices.

Starting on Oct. 3, the prices on lattes, cappuccinos, drip coffee, and other drinks will go up 5 cents at company-operated stores in North America. Starbucks is also jacking up the price of its coffee beans by roughly 50 cents per pound, or an average of 3.9%. . . .

The timing is certainly odd. For a while now, Starbucks has been struggling with labor disputes. Rivals McDonald's, Dunkin' Donuts, and Canadian restaurant chain Tim Horton's are steaming into its turf. . . .

A CONFIDENT COMPANY. If Starbucks were really worried about any of these issues, the last thing its senior execs would consider is a price hike. In fact, Starbucks' dominant market position gives it unique pricing flexibility. Every week, the company succeeds in persuading nearly 40 million people to buy pricey espresso drinks.

"The company is selling a product that has become part of our daily lives, said Kristine Koerber, an analyst at JMP Securities. "Raising prices by a nickel is not going to meet any resistance."

Company officials say the higher prices are intended to offset higher labor and fuel costs. And while the price increases are small, they underscore just how confident Starbucks remains about its growth prospects and its ability to fend off new competitive threats. Koerber and many other analysts seem to support this optimism. "You're not going to raise prices if you have the competitive or macroeconomic environment going against you," she says.

—Stanley Holmes

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Analysis: A monopolistically competitive firm has the power to increase price unilaterally. The greater the brand loyalty, the less unit sales will decline in response.

in monopolistic competition is large enough to have some **market power.** If a perfectly competitive firm increases the price of its product, it will lose all its customers. Recall that a perfectly competitive firm confronts a horizontal demand curve for its output. Competition is less intense in monopolistic competition. ***A monopolistically competitive firm confronts a downward-sloping demand curve for its output.*** When Starbucks increases the price of coffee, it loses some customers, but nowhere close to all of them (see News.) Starbucks, like other monopolistically competitive firms, has some control over the price of its output. This is the *monopoly* dimension of monopolistic competition.

market power: The ability to alter the market price of a good or service.

Independent Production Decisions

In an oligopoly, a firm that increased its price would have to worry about how rivals might respond. In monopolistic competition, however, there are many more firms. As a result, ***modest changes in the output or price of any single firm will have no perceptible influence on the sales of any other firm.*** This relative independence results from the fact that the effects of any one firm's behavior will be spread over many other firms (rather than only two or three other firms, as in an oligopoly).

The relative independence of monopolistic competitors means that they don't have to worry about retaliatory responses to every price or output change. As a result, they confront more traditional demand curves, with no kinks. The kink in the oligopolist's curve results from the likelihood that rival oligopolists would match any price reduction (to preserve market shares) but not necessarily any price increase (to increase their shares). In monopolistic competition, the market shares of rival firms aren't perceptibly altered by another firm's price changes.

barriers to entry: Obstacles, such as patents, that make it difficult or impossible for would-be producers to enter a particular market.

Low Entry Barriers

Another characteristic of monopolistic competition is the presence of *low* **barriers to entry**—it's relatively easy to get in and out of the industry. To become a coffee vendor, all