

AAU - Microeconomics (ECO 120/2) - Spring 2010

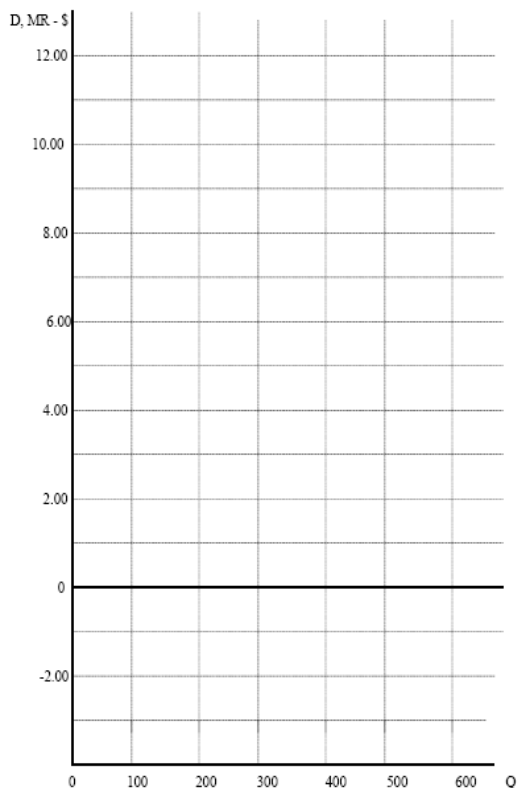
Part I

For a **perfectly competitive firm** marginal revenue and price are the same thing. A competitive firm can sell as much or as little output as it desires at the market price on a take-it-or-leave-it basis, but it is too small to have any influence on the price itself. A competitive firm is a price taker.

For a **monopolist** however, marginal revenue and price are **NOT** the same thing. If a monopolist faces a downward sloping demand curve, it means that the price must be lowered if the monopolist wants to sell more output. Assuming the monopolist charges all customers the same price, marginal revenue will be less than price at any given level of output (greater than one). A monopolist is thus a price searcher, who must seek to find the levels of price, output, and marginal revenue that will maximize profits.

Assuming that a monopolist faces the demand curve indicated in the table below, fill in the blanks in the table and plot both the demand curve (labeled D) and the marginal revenue curve (labeled MR).

Price	Quantity Demanded	Total Revenue	Marginal Revenue
\$12.00	100	\$1,200	—
\$10.50	200	\$2,100	\$9.00
\$9.00	300	\$2,700	\$
\$7.50	400	\$	\$
\$6.00	500	\$3,000	\$0.00
\$4.50	600	\$2,700	\$-3.0

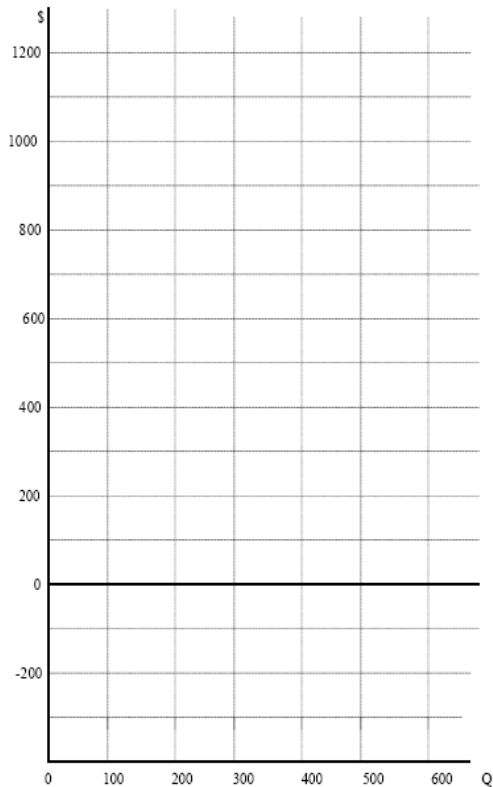


Part II

Like other producers in a market economy, a monopolist tries to maximize profit by producing at an output where marginal cost (MC) equals marginal revenue (MR). This problem considers the choice of output level by a monopolist.

The table below presents a summary of the relevant cost and revenue data facing a pure monopoly firm. Fill in the blanks in the table and plot the data for MC, MR, ATC, and Demand in the graph. After you have completed the table and the graph, answer the questions on the following page by filling in the blanks and shading in the area indicated.

Q	TC	MC	ATC	TR	MR	P
0	\$0	-----	-----	\$0	-----	-----
100	\$900	\$9.00	\$9.00	\$1200	\$12.00	\$12.00
200	\$1600	\$7.00	\$8.00	\$2100	\$9.00	\$10.50
300	\$2100	\$ _____	\$7.00	\$2700	\$ _____	\$9.00
400	\$2400	\$ _____	\$ _____	\$3000	\$3.00	\$ _____
500	\$3000	\$6.00	\$ _____	\$3000	\$ _____	\$ _____
600	\$4200	\$12.00	\$ _____	\$2700	\$-3.00	\$ _____



1. A profit maximizing monopolist would produce an output of units.
2. At this level of output, MC is \$ per unit and MR is \$..... per unit.
3. At this level of output, ATC is \$..... per unit and P is \$..... per unit.
4. This gives the monopolist an economic profit of \$..... per unit for a total economic profit of \$..... .
5. Shade in the area on the graph that represents the total profit figure indicated in your answer to question 4.