

WEEK 5

PROFIT MAXIMIZATION IN PERFECT COMPETITION

MARKET STRUCTURES



Imperfect competition



**Perfect
competition**

**Monopolistic
competition**

Oligopoly

Duopoly

Monopoly

PERFECT COMPETITION

- ☐ There are many buyers and many sellers in the market.
- ☐ Competitors can freely enter and exit the industry.
- ☐ Each seller produces a homogeneous product.
- ☐ Perfect Information
- ☐ Sellers are Price-Takers

PRICE TAKERS

Individual firms output decisions do not affect the market price.

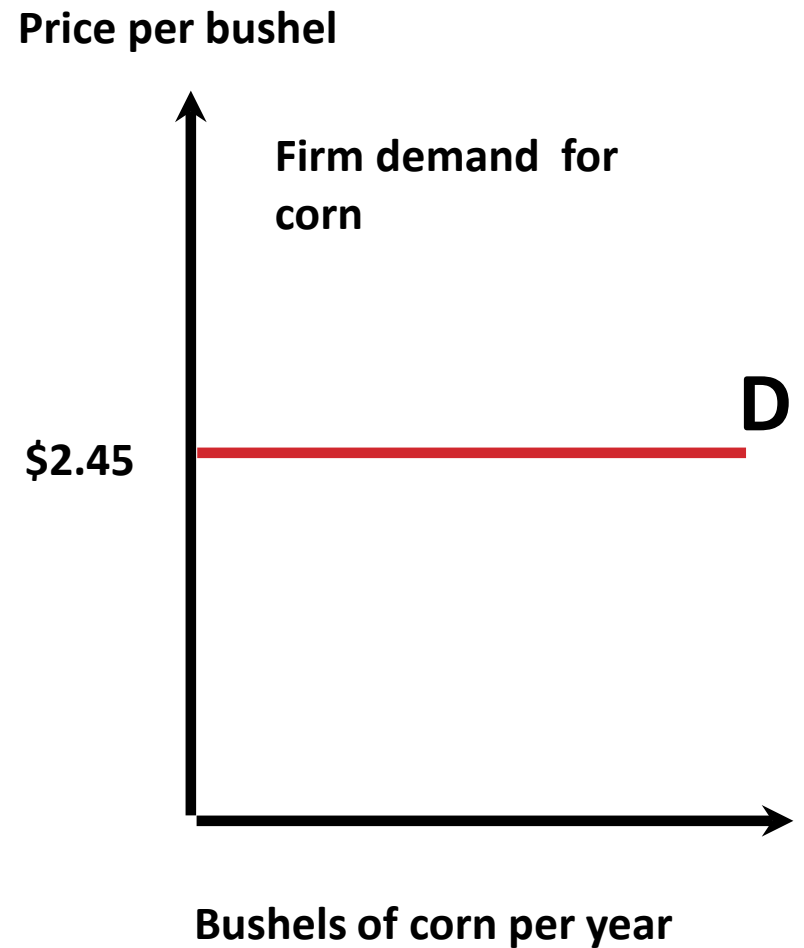
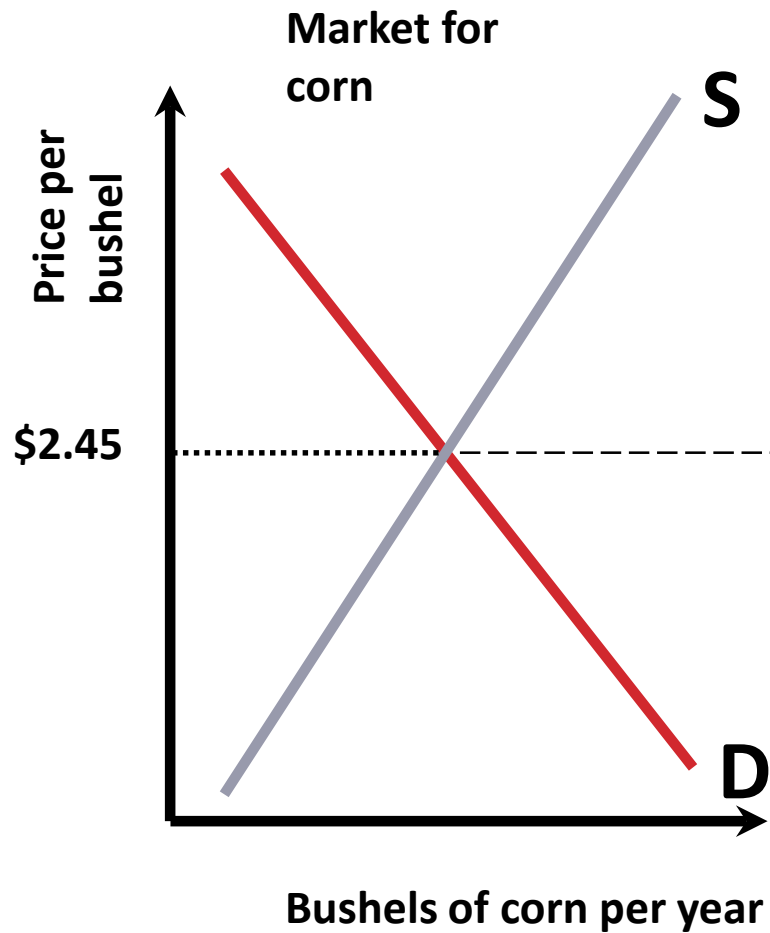
Individual firms must take the market price and do the best they can within these constraints.

MARKET DEMAND VS. FIRM DEMAND

The market demand curve is always downward sloping.

The demand curve facing a perfectly competitive firm is horizontal.

MARKET DEMAND VS. FIRM DEMAND



PROFIT

***THE DIFFERENCE BETWEEN TOTAL
REVENUE AND TOTAL COSTS***

Profit = Total Revenue (TR) - Total Cost (TC)

TOTAL AND MARGINAL REVENUE

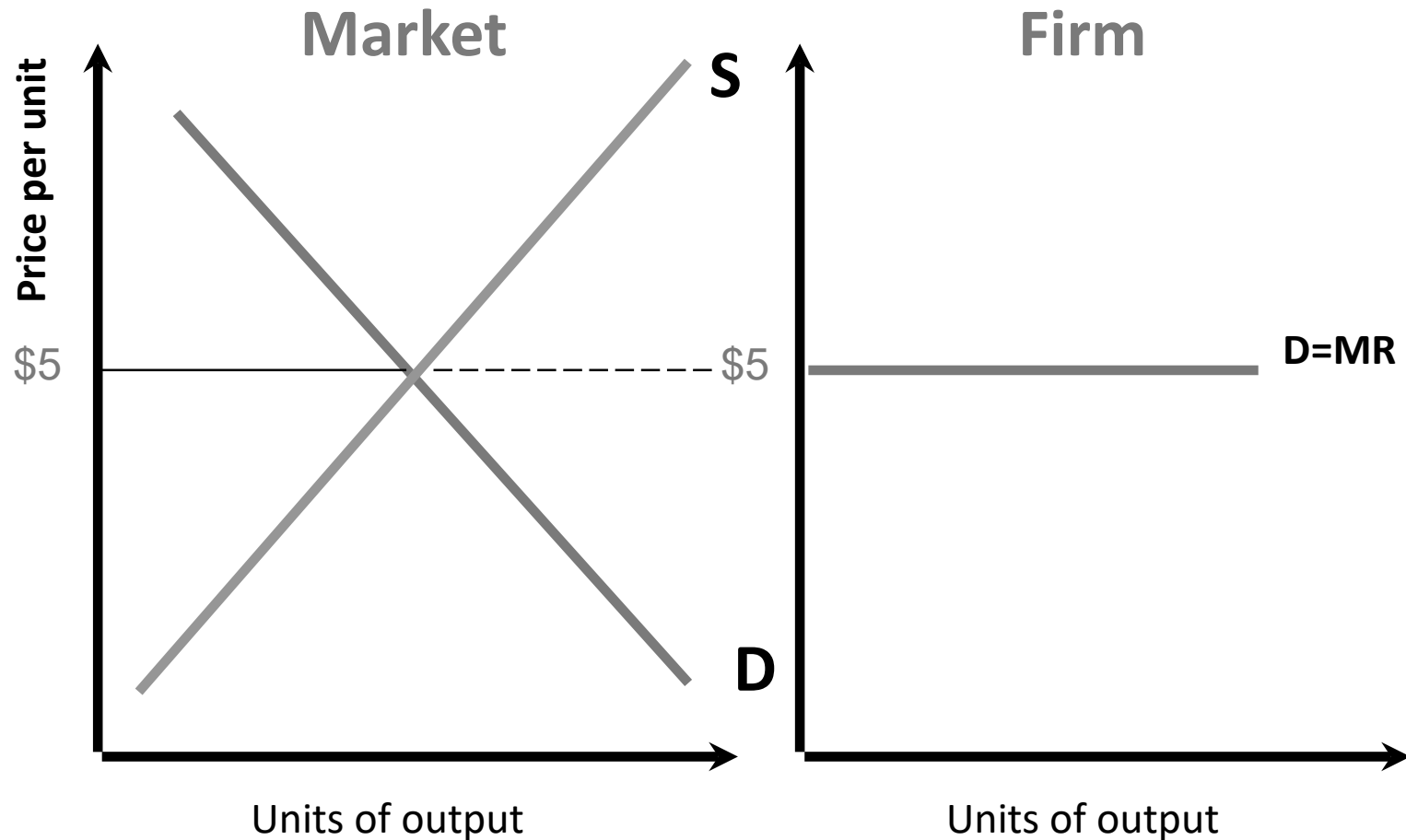
u Total revenue is the amount of revenue the firm takes in from the sale of its product.

$$TR = \text{price} \times \text{quantity sold}$$

u Marginal revenue is the additional revenue that a firm takes in when it increases output by one additional unit.

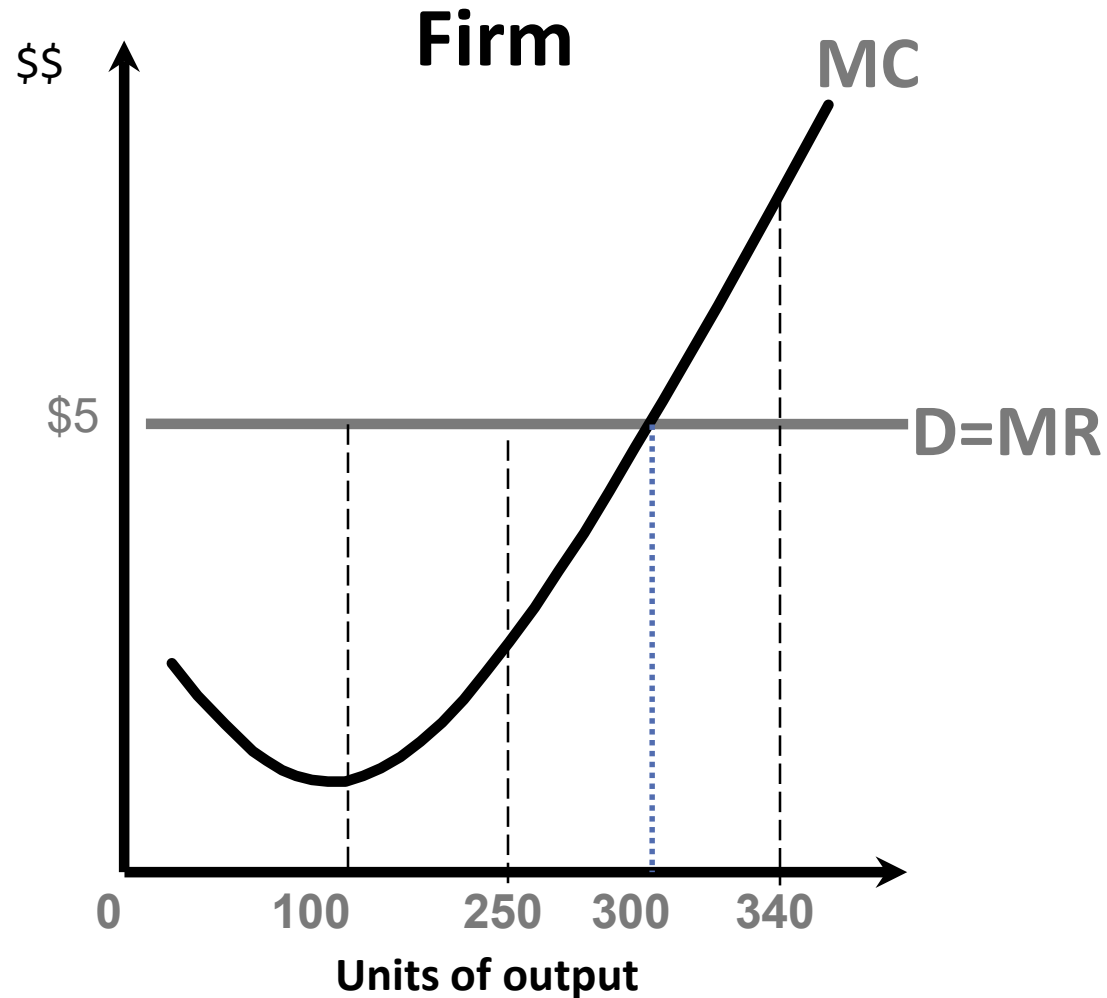
$$MR = \Delta TR / \Delta Q$$

IN A PERFECTLY COMPETITIVE MARKET,
THE FIRM'S DEMAND CURVE IS THE FIRM'S MARGINAL
REVENUE CURVE:

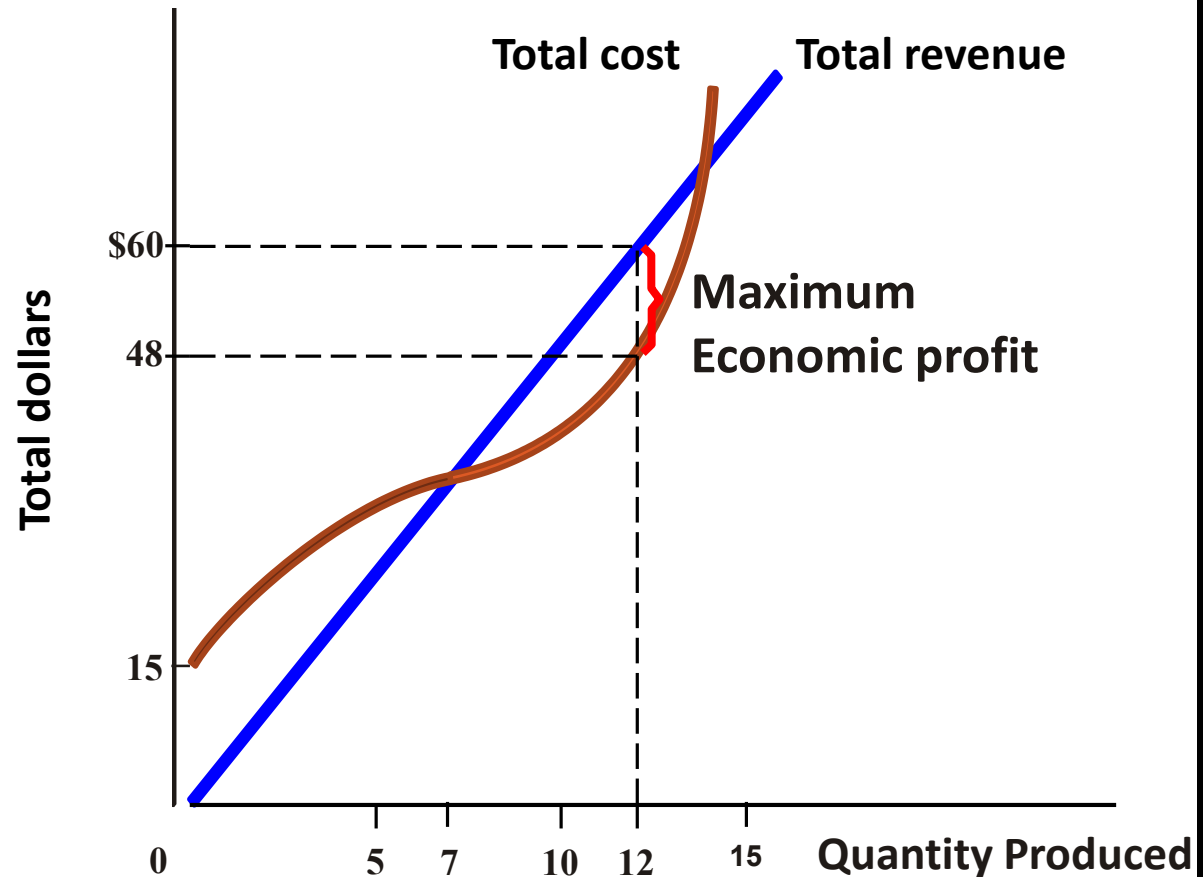


PROFIT MAXIMIZATION:

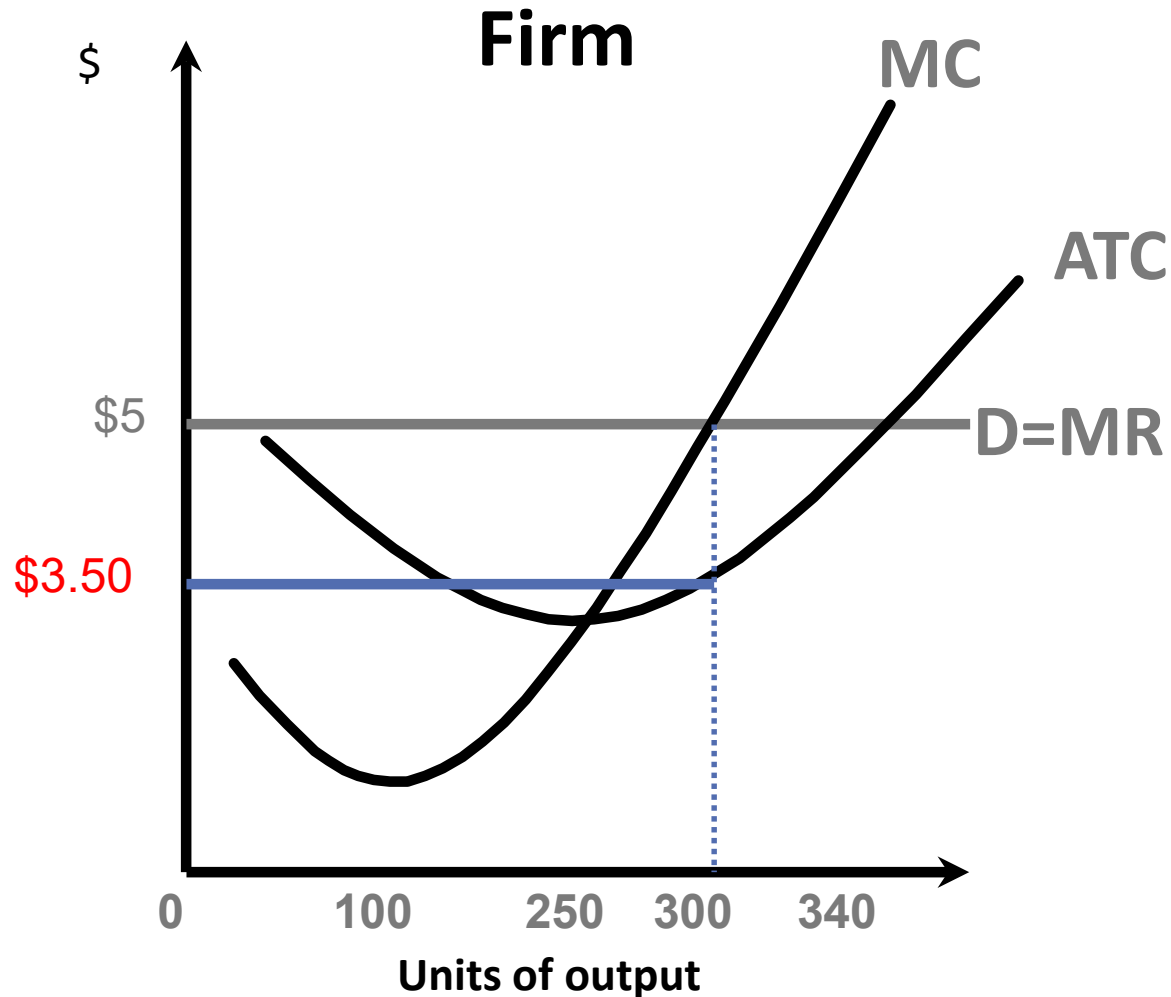
$MR = MC$



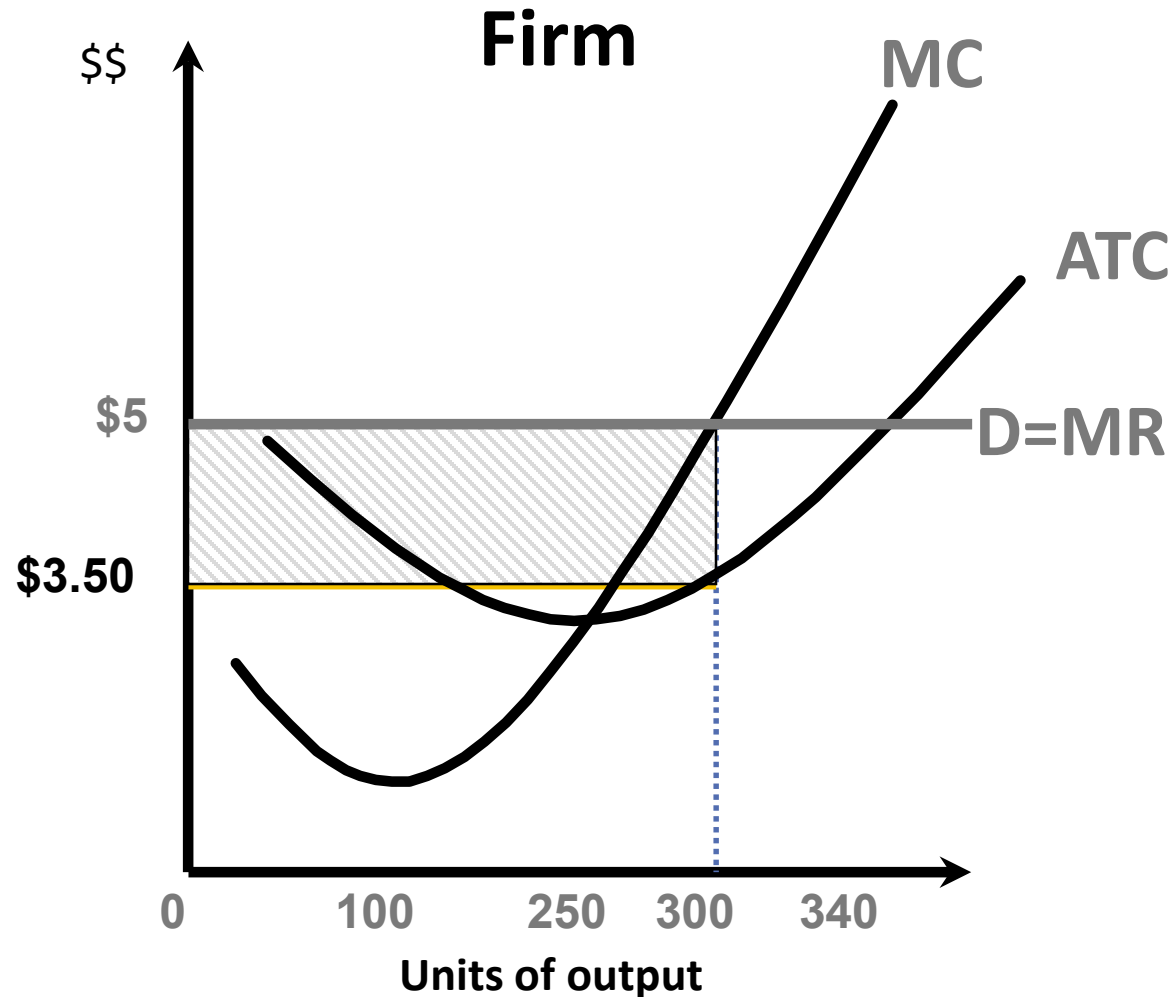
**TOTAL
REVENUE
MINUS
TOTAL COST**



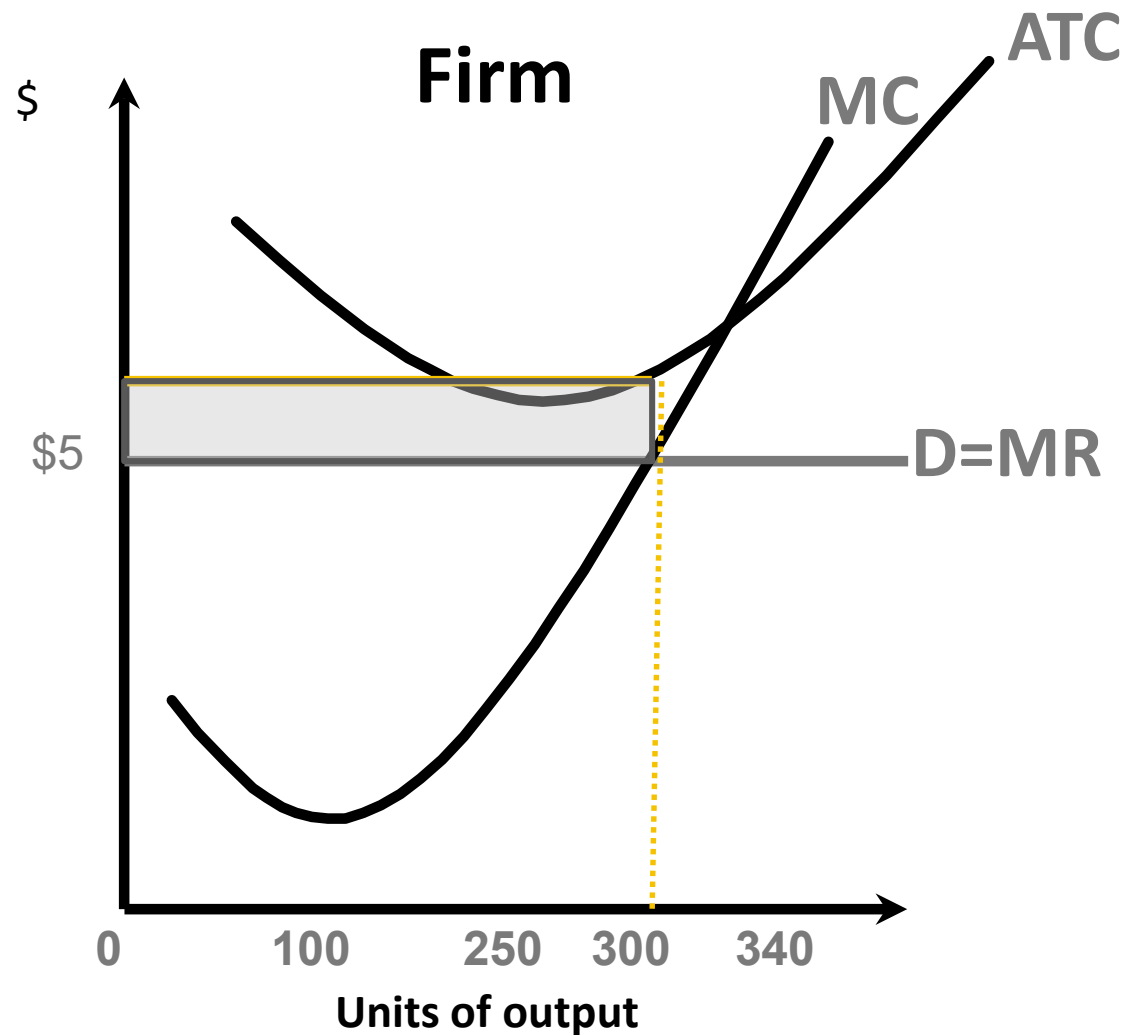
$$\text{PROFIT} = \text{TOTAL REVENUE} - \text{TOTAL COST}$$



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FIRM'S SHORT-RUN SUPPLY CURVE.

