

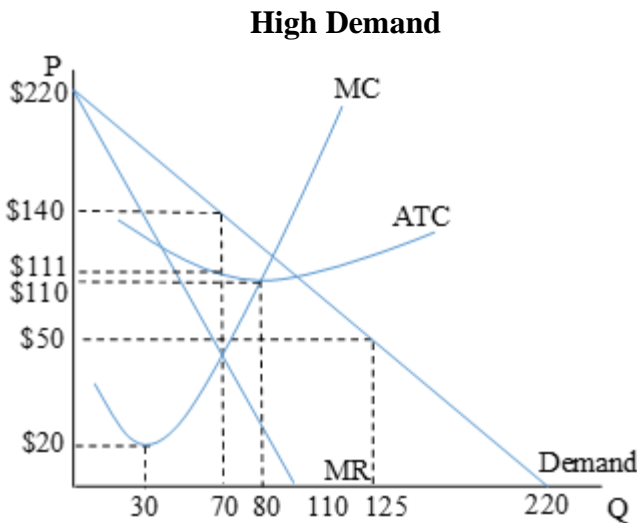
Topic 13 – Monopolistic Competition and Oligopoly

I. Monopolistic Competition

Each firm has a \_\_\_\_\_ on producing a specific product (trademark/brand name), but there is free entry and exit into the broader product category.

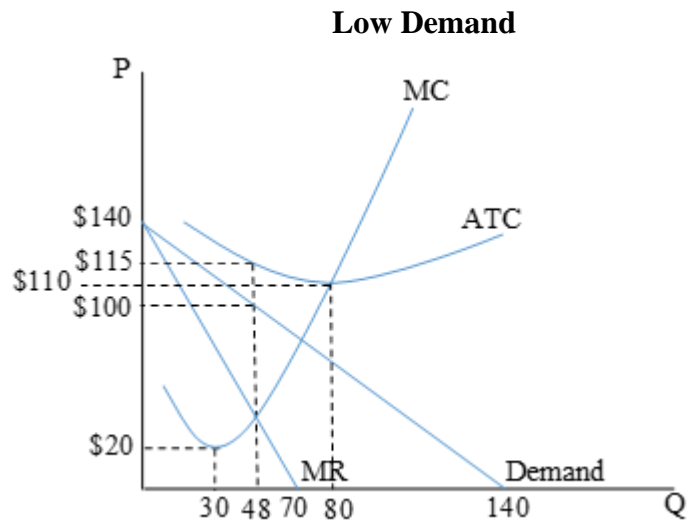
Short-Run Firm Behavior

In the short-run, each firm observes \_\_\_\_\_ for their specific product, and maximizes profit by producing where \_\_\_\_\_.



SR:  $\pi =$

LR:

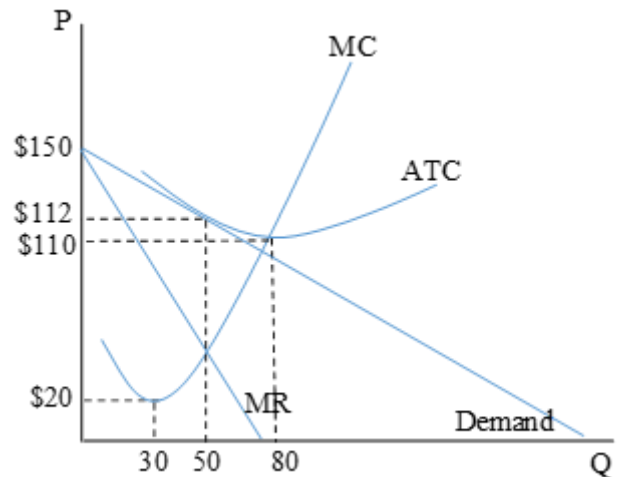


SR:  $\pi =$

LR:

Long-Run Equilibrium

In the long-run, firms \_\_\_\_\_ or \_\_\_\_\_ the broader market based on profit signals. The long-run equilibrium occurs where \_\_\_\_\_.



II. Summary of Market Structures

	<b>Perfect Competition</b>	<b>Monopolistic Competition</b>	<b>Monopoly</b>
<i>Number of Firms</i>	Many	Many	One
<i>Goal of Firms</i>	Maximize Profit	Maximize Profit	Maximize Profit
<i>Rule of <math>\pi</math> Maximization</i>	MR = P = MC	MR = MC	MR = MC
<i>Free Entry and Exit?</i>	Yes	Yes	No
<i>Produces the Socially Optimal Quantity?</i>			
<i>Can earn Positive Profits in the Short-Run?</i>			
<i>Can earn Positive Profits in the Long-Run?</i>			

III. Oligopoly

The market is composed of only \_\_\_\_\_ that interact strategically to maximize profits.

Game Theory

The study of behavior in strategic situations.

Defining a Game

- 1.
- 2.
- 3.

**Example: Prisoner’s Dilemma**

Bonnie and Clyde have been arrested for illegal possession of a firearm, but they are also suspected of robbing a bank. If they cooperate with police, the judge will give them lower their sentence. If they both remain silent, they will go to jail for 1 year. If someone confesses, they go free, but their partner goes to jail for 20 years. If they both confess, they will both go to jail for 8 years. Police question them in separate rooms.

		<b>Bonnie</b>			
		Silent		Confess	
<b>Clyde</b>	Silent	B:	C:	B:	C:
	Confess	B:	C:	B:	C:

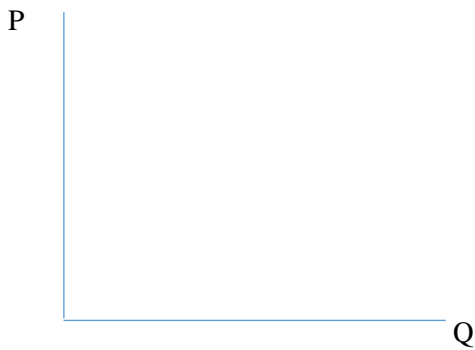
Dominant Strategy

When one strategy is the \_\_\_\_\_ regardless of what the other player(s) choose to do.

Nash Equilibrium Any combination of strategies in which each player’s strategy is their best option given the other players’ actions.

What’s the Dilemma?

**Example:** Suppose there are only two oil producing countries in the world – Saudi Arabia and Iran. There are no fixed costs, and the cost of producing each barrel of oil is  $MC = \$50$ . Demand for oil is given by  $P = 200 - Q$ .



Suppose that each country has only two options.

1. Collude: charge  $P = \$125$
2. Compete: charge  $P = \$100$

		Saudi Arabia	
		Collude ( $P = \$125$ )	Compete ( $P = \$100$ )
Iran	Collude ( $P = \$125$ )	SA:                  Iran:	SA:                  Iran:
	Compete ( $P = \$100$ )	SA:                  Iran:	SA:                  Iran:

Dominant Strategy:

Nash Equilibrium:

Predictions about Oligopoly:

Repeated Game

Optimal Strategy:

Predictions about Oligopoly:

Price-Fixing Is Illegal

IV. Assignments

1. Video Assignment and Problem Set 13 due on 4/3/20