

## LESSON 6: PRICE DETERMINATION

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### ***Focus Question: How are prices determined in our economy?***

#### Objectives

##### ***Students will be able to:***

- Explain how supply and demand affect prices.
- Discuss the factors that change supply and demand.
- Create and interpret supply and demand charts.
- Discuss the effects of shifts in the demand and supply curves on prices.

#### Standards

**NES:** 1, 7, 8, 9, 13

**ELA:** 1, 2, 3

#### Materials

Text, pp. 169-199.

#### Teaching Strategies

##### ***Introduction:***

- Distribute Worksheet 6A, “Shopping.” Students should complete the exercise on the worksheet as homework prior to this lesson. Then, as part of the introductory class discussion, have students explain their answers to the following questions:
  - What conclusions can you draw about prices from this worksheet?
  - How can you explain any similarities in prices in each of the stores?
  - How can you explain any differences in prices?
  - What question does this worksheet raise about the price system in the U.S.?

##### ***Body of lesson:***

- Distribute Worksheet 6B, “VE Gasoline Demand and Supply Schedule.” Have students complete Exercises 1 and 2 on the worksheet. Then have them explain their answers to the following:
  - What does the graph show us about the relationship between price and the quantity of gasoline demanded?
  - What does the graph show us about the relationship between price and the quantity of gasoline supplied?
  - What is the equilibrium price? Why is it rarely the case that this is the actual price at which sales are made? What other factors enter into setting a price besides supply and demand?
  - How would you use this information about supply and demand in setting the price of your VE product?
- Have students complete Exercises 3 and 4. Then, distribute Worksheet 6C, “Demand and Supply Charts.” Ask them to explain their answers to the following:
  - How do your charts compare to the ones on Worksheet 6C?
  - What does Worksheet 6C tell us about how the market price changed,  $E_2$ , as a result of consumers purchasing cars that use more gas?
  - What conclusions can you draw about how prices change when the demand increases?
  - What does Worksheet 6C tell us about how the market price changed,  $E_3$ , as a result of the two oil-producing nations going to war?
  - What conclusions can you draw about how prices change when the supply decreases?

##### ***Summary/Assessment:***

Ask students to write one paragraph of a news story that describes the effect of the event on oil prices and the overall economy to accompany one of the following headlines:

- *OPEC NATIONS AGREE TO CUT PRODUCTION*
- *ECONOMIC RECOVERY SPREADS WORLDWIDE*
- *NEW GASOLINE-SAVING ENGINE INVENTED*

Worksheet 6A

**Shopping**

**Exercise.** For homework, find the prices of three different brands of gasoline at three different gasoline stations, one dozen eggs at three different supermarkets, and your favorite CD at three different stores that sell CDs. Record the prices in the chart below.

ONE GALLON REGULAR GAS	ONE DOZEN EGGS	FAVORITE CD
Gasoline 1 brand name: _____ \$ _____ per gallon	Supermarket 1 name: _____ \$ _____ per dozen	Store 1 name: _____ \$ _____ for the CD
Gasoline 2 brand name: _____ \$ _____ per gallon	Supermarket 2 name: _____ \$ _____ per dozen	Store 2 name: _____ \$ _____ for the CD
Gasoline 3 brand name: _____ \$ _____ per gallon	Supermarket 3 name: _____ \$ _____ per dozen	Store 3 name: _____ \$ _____ for the CD

Worksheet 6B

**VE Gasoline Demand and Supply Schedule**

**Exercise 1.** You work in the research department of your VE gasoline firm. You have been asked to prepare two charts. The first is based on Table 1, which came from a report about consumers who were asked to estimate how much gasoline they would buy at different price levels. Plot the information and connect the dots with a line on the graph below. This chart is called a demand-curve, label it "D<sub>1</sub>."

Table 1.

<i>If the price of a gallon of gasoline were . . .</i>	<i>The estimated amount of gasoline sold would be . . .</i>
\$ 0.40	55 million gallons
0.80	40 million gallons
1.20	25 million gallons
1.60	10 million gallons
2.00	5 million gallons
2.40	1 million gallons

**Exercise 2.** Your second task is based on Table 2 that came from a report about gasoline sellers who were asked to estimate how much gasoline they would sell at different price levels. Plot the information and connect the dots with a line on the graph below. This chart is called a supply curve; label it "S<sub>1</sub>." Place an "E<sub>1</sub>" at the spot where the demand curve meets the supply curve. "E," the price at which the demand and supply curves meet is called equilibrium price. It is the price where supply and demand are equal and in theory the price at which the sale takes place.

Table 2.

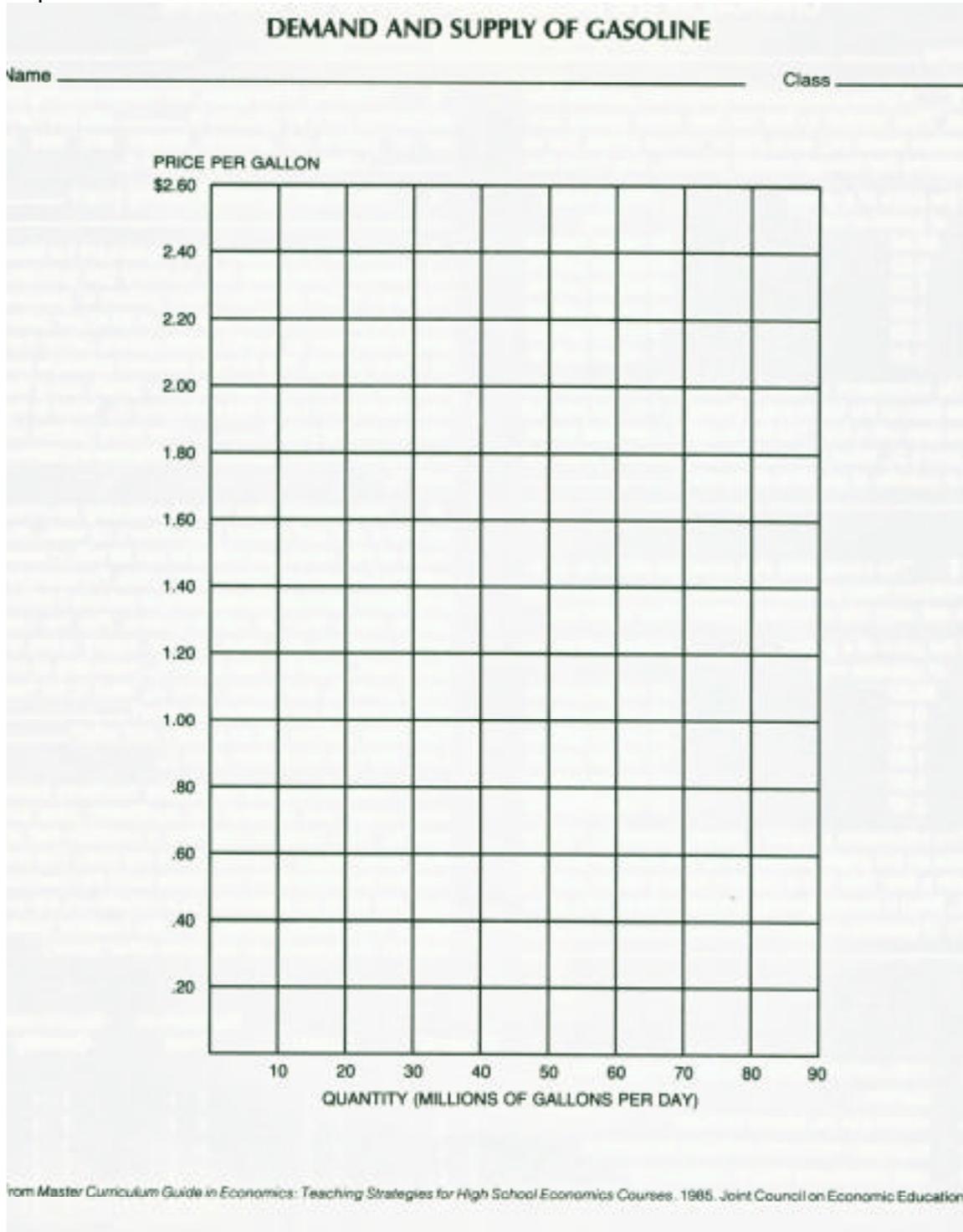
<i>If the price of a gallon of gasoline were . . .</i>	<i>The estimated amount of gasoline sold would be . . .</i>
\$ 0.40	25 million gallons
0.80	40 million gallons
1.20	55 million gallons
1.60	70 million gallons
2.00	85 million gallons
2.40	90 million gallons

**Exercise 3.** Assume it is a year later. Since last year larger cars, which use a lot more gas, have become popular. As a result consumers want to buy 30 million more gallons of gasoline per day at every price. For example, at \$.40 per gallon, people now want to buy 85 rather than 55 million gallons. On the same graph below, plot a new demand schedule and draw a new demand curve. Label the curve D<sub>2</sub>. What is the new equilibrium price? Label it E<sub>2</sub>.

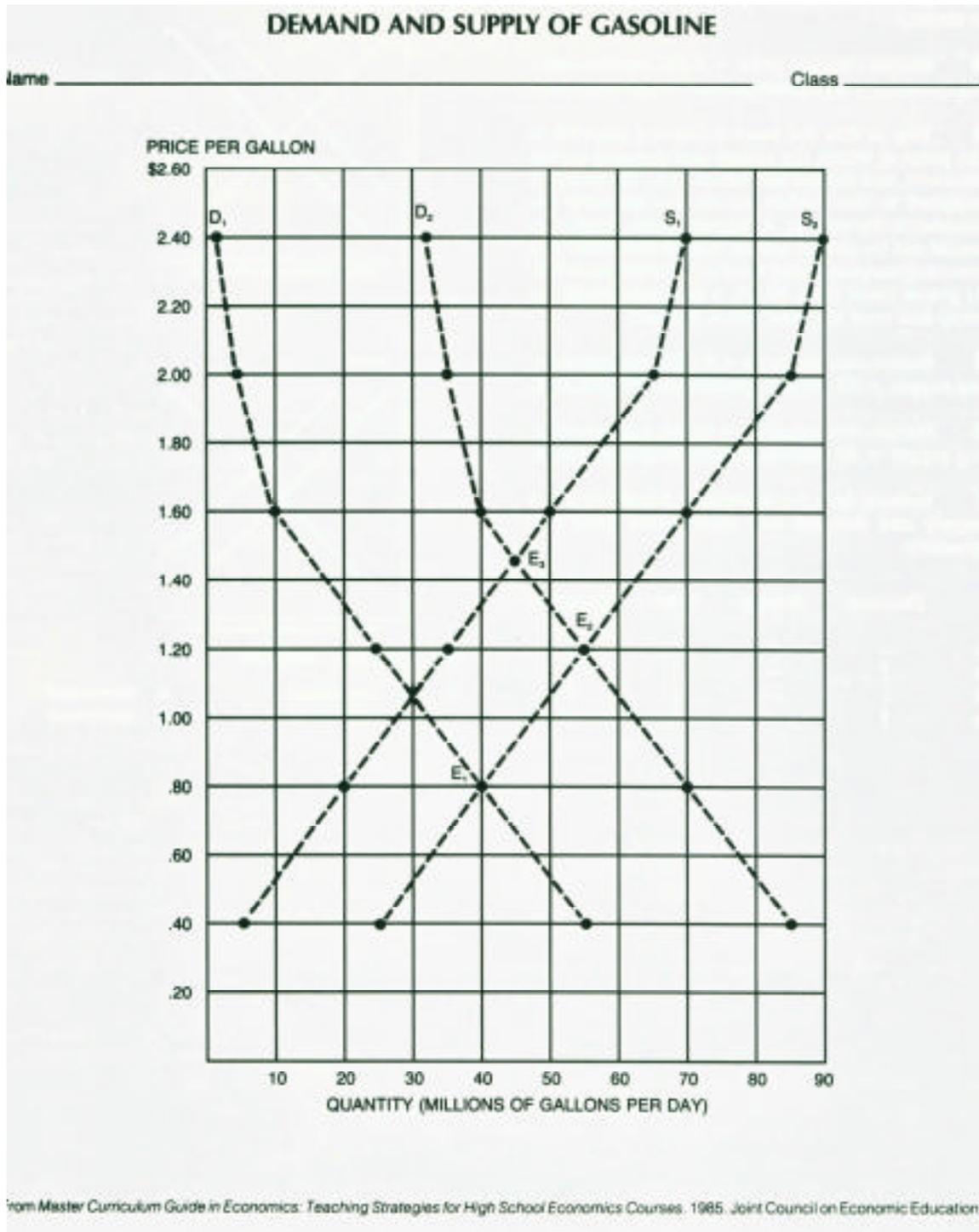
**Exercise 4.** Assume two oil-producing countries go to war. As a result, sellers have 20 million fewer gallons of gasoline to sell per day at every price. For example, at \$.40 per gallon, sellers have only 5 rather than 25 million gallons a day to sell. On the same graph, plot a new supply schedule and draw a new supply curve on the graph. Label the curve S<sub>2</sub>. What is the new equilibrium price? Label it E<sub>3</sub>.

Worksheet 6B, "VE Gasoline Demand and Supply Schedule" (continued)

Graph



Worksheet 6C, "Demand and Supply Charts"



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