

## Homework Problem #23

### Short Run and Long Run Competitive Equilibrium

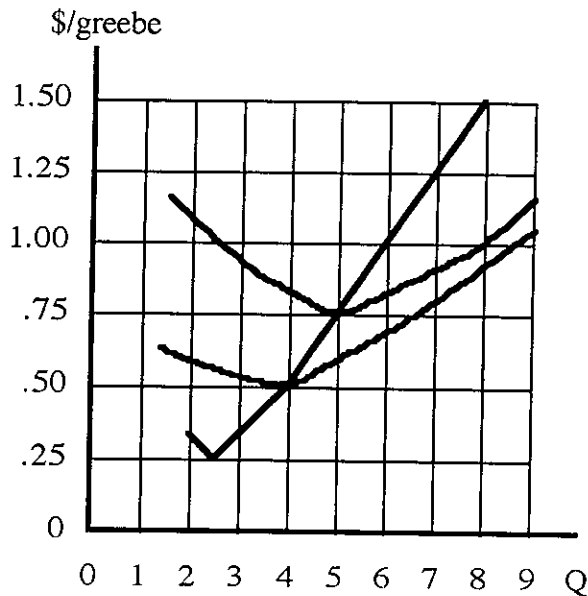
PRINT YOUR NAME \_\_\_\_\_  
(LAST) (FIRST)

#### PART I

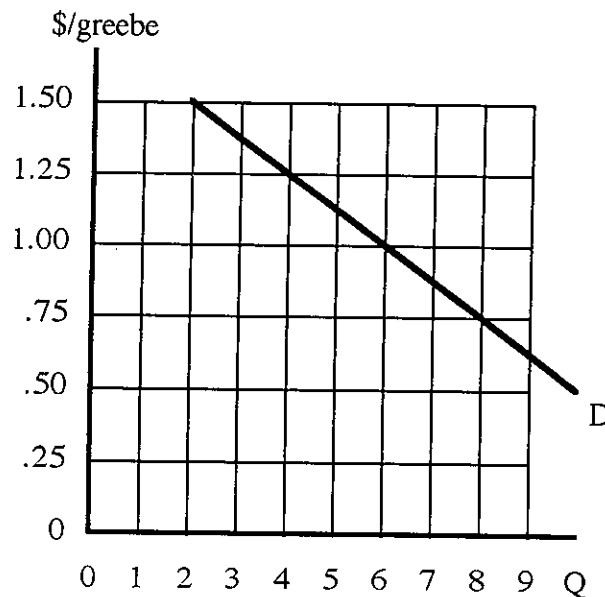
There are currently one thousand producers of greebes, each with **economic costs** like those shown in diagram A below. (You should know how to label each of the cost curves.) The market demand for greebes is shown in diagram B below.

- A. Plot on diagram B the current **market supply curve** for greebes and label this curve "S". (Ask how much **each** producer will supply at various prices, and figure how much the total supply **from all thousand producers together** will be at those prices. Note: one million is a thousand thousand--1,000,000.)

A. Cost Situation for Each Greebe Producer



B. Market Supply and Demand for Greebes



(thousands of greebes per week)

(millions of greebes per week)

- B. Shade in the appropriate profit (or loss) rectangle in diagram A, and calculate the total amount of economic profit or loss each typical greebe producer will make under these conditions. Fill in the blanks below to aid you in your calculations.

Price (P) received by each greebe producer: \$\_\_\_\_\_ per greebe

Quantity (Q) produced by each greebe producer: \_\_\_\_\_ thousand greebes

Average total cost (ATC) for this quantity (approximate): \$\_\_\_\_\_ per greebe

Economic profit (loss) for each unit produced (P - ATC): \$\_\_\_\_\_ per greebe

Total economic profit (loss) for each greebe producer: Profit (loss) per unit x quantity produced = \$\_\_\_\_\_ per week.

C. Is the greebe market in long-run equilibrium? Why or why not?

D. What is the long run equilibrium price in this market? \$\_\_\_\_\_ per greebe

How many greebes will each firm produce at this price? \_\_\_\_\_ thousand greebes per week.

What will be the total market quantity of greebes produced at this price? \_\_\_\_\_ million greebes per week.

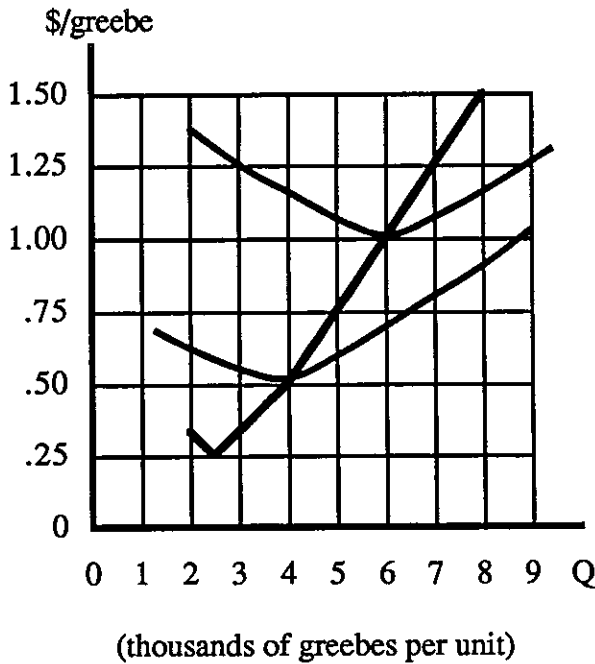
How many firms will be in the market at this price? \_\_\_\_\_

**PART II**

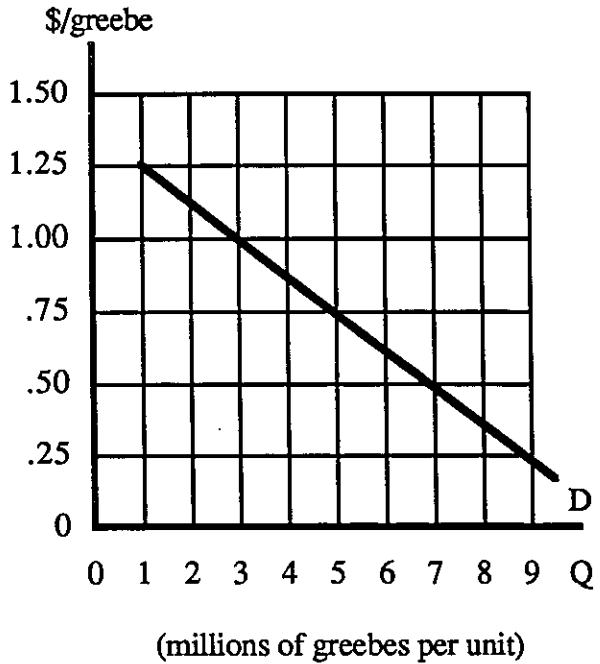
Now, lets start all over again with a new set of cost and demand conditions in the greebe market. There are again currently one thousand producers of greebes, each with **economic costs** like those shown in diagram A below. The market demand for greebes is shown in diagram B below.

A. Plot on diagram B the current **market supply curve** for greebes and label this curve "S".

A. Cost Situation for Each Greebe Producer



B. Market Supply and Demand for Greebes



PRINT YOUR NAME \_\_\_\_\_  
(LAST) (FIRST)

- B. Shade in the appropriate profit (or loss) rectangle in diagram A, and calculate the total amount of economic profit or loss each typical greebe producer will make under these conditions. Fill in the blanks below to aid you in your calculations.

Price (P) received by each greebe producer: \$\_\_\_\_\_ per greebe

Quantity (Q) produced by each greebe producer: \_\_\_\_\_ thousand greebes

Average total cost (ATC) for this quantity (approximate): \$\_\_\_\_\_ per greebe

Economic profit (loss) for each unit produced (P - ATC): \$\_\_\_\_\_ per greebe

Total economic profit (loss) for each greebe producer: Profit (loss) per unit x quantity produced = \$\_\_\_\_\_ per week.

- C. Is the greebe market in long-run equilibrium? Why or why not?

- D. What is the long run equilibrium price in this market? \$\_\_\_\_\_ per greebe

How many greebes will each firm produce at this price? \_\_\_\_\_ thousand greebes per week.

What will be the total market quantity of greebes produced at this price?  
\_\_\_\_\_ million greebes per week.

How many firms will be in the market at this price? \_\_\_\_\_