

3. a. Use the table on the previous page to draw a graph showing the market demand curve and supply curves ( $D_0$  and  $S_0$ ) for a hypothetical market for leather jackets. On your graph, indicate the equilibrium price and quantity.
- b. Due to an increase in the number of producers in this market, the annual quantity supplied in this market increases by 33 000 jackets at every price. On the same graph you have drawn in part a., show the new market supply curve ( $S_1$ ) and indicate the new equilibrium price and quantity.
- c. Calculate the change in total revenue for producers in this market due to the shift from  $S_0$  to  $S_1$ . Is the demand for leather jackets between the old and new equilibrium points inelastic or elastic? Explain.

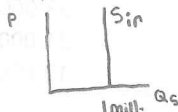
Market Demand Schedule for Canoes

| Price<br>(\$ per canoe) | Quantity Demanded<br>(canoes per month) |
|-------------------------|---|
| \$800                   | 400                                     |
| 600                     | 800                                     |
| 400                     | 1200                                    |
| 200                     | 1600                                    |

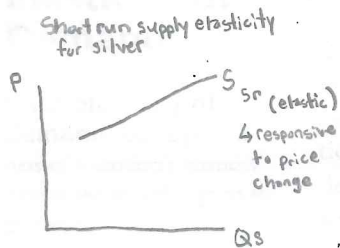
4. a. Use the market demand schedule for canoes shown above to find the total revenue at each given price.
- b. On the basis of your answer to part a., state whether the market demand for canoes is elastic, inelastic, or unit-elastic in the three price ranges \$800 to \$600, \$600 to \$400, and \$400 to \$200.
- c. Compute the numerical values of demand elasticity in the three relevant price ranges.
- d. Are your answers to parts b. and c. consistent? Explain.
- e. Graph the market demand curve for canoes ( $D$ ) and calculate the numerical value of its slope. Does a demand curve with a constant slope have a constant numerical elasticity? Explain.
5. Calculate the appropriate elasticity coefficient in each of the following cases:
- Annual purchases of computers rise from 200 000 to 300 000 when average consumer incomes increase from \$50 000 to \$70 000.
  - Consumer A's monthly magazine purchases falls from 4 to 3 magazines when the price she pays each month for unlimited access to the Internet decreases from \$20 to \$10.
  - Weekly purchases of packs of chewing gum rise from 1.2 million to 1.7 million packs when their price declines from \$1 to 85 cents.
  - A fall in the average price of DVDs from \$40 to \$35 increases purchases of DVD players from 10 000 to 15 000 per month.
  - A rise in the price of wheat from \$110 to \$135 per tonne increases the amount supplied by wheat farmers from 8 million to 9 million tonnes.

6. In the silver market, 1 million ounces are offered for sale each month by producers at the initial price of \$6 per ounce. The price then rises to \$8.

- a. What happens to the quantity supplied of silver in the immediate run at the new \$8 price? Sketch the immediate-run supply curve to explain your answer.



perfectly inelastic  
as price change  
does not affect  
quantity supplied



Price jumps and incentive to take advantage of profit gains

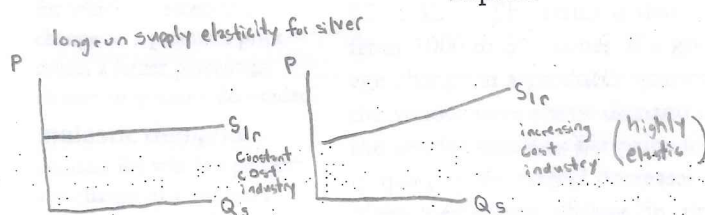
b. In what direction will the quantity supplied of silver change in the short run at the new \$8 price? Sketch the short-run supply curve to explain your answer.

c. How will the price of silver change in the long run if this is a constant-cost industry? an increasing-cost industry? Sketch long-run supply curves to explain your answers.

7. a. Compute the numerical values of supply elasticity for the market supply curve for strawberries (S) shown in Figure 2.5 in the two price ranges \$1.50 to \$2, and \$2 to \$2.50.

b. Is the supply elastic, inelastic, or unit-elastic between prices \$1.50 and \$2.50?

c. Must a supply curve with a constant slope have a constant numerical elasticity? Explain.



No effect on price level in long run as silver has no effect on resource prices (as silver producers not a major user of any single resource)

→ production expands w/ profit motive until  $Q_s$  drives price back down to \$6 (invisible hand)

an increase in  $Q_s$  leads to an increase in the price of a single resource as silver industry a major user of this single resource

→ production grows to take adv. of extra profits until driven lower, but above \$6 as now higher costs of production on supply side