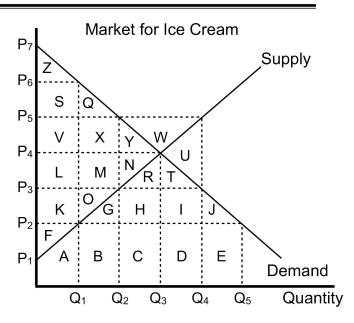


<u>**Part 1 - Supply and Demand Practice-**</u> Use the graph for ice cream to answer the questions below.

- 1. What is the equilibrium price and quantity?
- 2. Identify a price and quantity that could be the result of an increase in the price of milk, a key resource in the production of ice cream.
- 3. Identify a price and quantity that could be the result of a decrease in the price of popsicles, a substitute to ice cream.
- 4. Identify the area of consumer surplus at the equilibrium price.



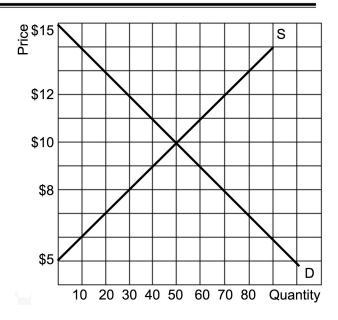
- 5. Identify the area of consumer surplus if the supply increased resulting in the equilibrium price of  $P_3$  and  $Q_4$ .
- 6. Assume instead that the demand decreased resulting in the equilibrium price of  $P_3$  and  $Q_2$ . Identify the area of producer surplus.
- 7. Identify the area of consumer surplus if a price ceiling is placed at  $P_2$ .
- 8. Identify the area of consumer surplus if a price ceiling is placed at  $P_5$ .
- 9. Identify the area of deadweight loss if a price floor is placed at P<sub>6</sub>.
- 10. Assume that a per-unit tax was placed on ice cream resulting in an equilibrium price of  $P_6$  and  $Q_1$ . Identify the area of consumer surplus.
- 11. Assume that a per-unit tax was placed on ice cream resulting in an equilibrium price of  $P_6$  and  $Q_1$ . Identify the area of deadweight loss.
- 12. Assume that a per-unit tax was placed on ice cream resulting in an equilibrium price of  $P_6$  and  $Q_1$ . Identify the area of tax revenue.
- 13. Assume instead that consumers can get ice cream at the world price of P<sub>2</sub>. Identify the area of consumer surplus after international trade.
- 14. Identify the quantity that will be imported if the world price is  $P_2$ .



## Microeconomics Unit 2 Practice Sheet

<u>**Part 2 - Calculation Practice-**</u> Use the graph for a competitive market to answer the questions below. Show your work.

- 15. What is the quantity demanded and quantity supplied at the price of \$13?
- Could an increase in supply result in an equilibrium price and quantity of \$12 and 30 units? Explain.
- 17. Calculate the consumer surplus at the equilibrium price.
- 18. Calculate the consumer surplus if a decrease in supply results in an equilibrium price of \$12.



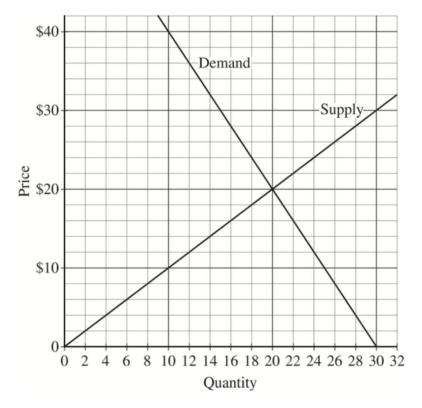
- 19. Calculate the producer surplus if an increase in demand results in an equilibrium price of \$12.
- 20. Calculate the deadweight loss if a decrease in demand results in an equilibrium price of \$8.
- 21. Calculate the consumer surplus if a price ceiling is placed at \$8.
- 22. What would be the equilibrium price and quantity if a \$2 per-unit tax is placed on the good?
- 23. How much tax revenue would be generated if a \$2 per-unit tax is placed on the good?
- 24. Would the incidence of tax from a \$2 tax mostly fall on consumers or producers? Explain.
- 25. Calculate the consumer surplus if consumers can get this product at the world price of \$7.
- 26. Calculate the elasticity of demand coefficient between the price of \$10 and \$9.
- 27. Calculate the elasticity of supply coefficient between the price of \$10 and \$12.
- 28. Assume the price fell from \$10 to \$8 causing the quantity demanded of a different product to increase from 100 to 120 units. Calculate the cross-price elasticity of demand coefficient.
- 29. Assume instead that the demand changes in such a way that a decrease in supply results in an equilibrium price and quantity of \$12 and 50 units. Calculate the elasticity of demand coefficient.



Part 3 - FRQ Practice- Complete the following question from the 2015 AP exam (Question 3).

## 2015 AP<sup>®</sup> MICROECONOMICS FREE-RESPONSE QUESTIONS

3. The graph below shows the market for widgets. The government is considering intervening in this market.



- (a) Calculate the total producer surplus at the market equilibrium price and quantity. Show your work.
- (b) If the government imposes a price floor at \$16, is there a shortage, a surplus, or neither? Explain.
- (c) If instead the government imposes a price ceiling at \$12, is there a shortage, a surplus, or neither? Explain.
- (d) If instead the government restricts the market output to 10 units, calculate the deadweight loss. Show your work.
- (e) Assume the price decreases from \$20 to \$12.
  - (i) Calculate the price elasticity of demand. Show your work.
  - (ii) In this price range, is demand perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic?