



MICROECONOMICS UNIT 2

Supply and Demand



BIG PICTURE IDEAS

- #1. The law of demand shows a _____ relationship between price and quantity demanded and the law of supply shows a _____ relationship between price and the quantity supplied.
- #2. _____ measures the responsiveness of one economic variable to a change in another.
- #3. _____ surplus, producer surplus, and _____ loss are used to analyze the efficiency and welfare effects of a market.
- #4. A _____ and _____ graph shows the equilibrium price and equilibrium quantity and can be used to predict and analyze changes in a market.
- #5. The effects of _____ intervention, like taxes, subsidies, tariffs, and _____ controls, can be analyzed using supply and demand.

■ Topic 2.1- Demand

1. The law of demand states there is an inverse (or negative) relationship between _____ and _____.
2. Why is the market demand curve downward sloping?
3. What are the five shifters of demand?
4. Goods A and B are substitutes. An increase in the price of Good A will cause the demand for Good B to _____.
5. _____ are bought and used together.
6. Good X is an inferior good. An increase in incomes will cause the demand for X to _____.

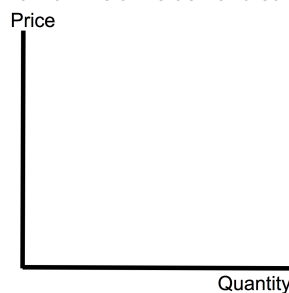
■ Topic 2.2- Supply

7. The law of supply states there is a direct (or positive) relationship between _____ and _____.
8. Why is the market supply curve upward-sloping?
9. What are the five shifters of supply?
10. Good X is an input of Good Z. A decrease in the price of Good X will cause the supply of Good Z to _____.
11. An excise tax on Good A will cause the supply to _____ and shift to the _____.
12. _____ are government payments to sellers.

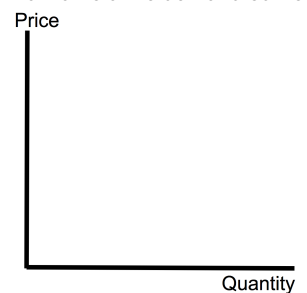
■ Topic 2.3- Price Elasticity of Demand

13. Identify the price elasticity of demand (PED) equation.
16. List three characteristics of goods with inelastic demand.
17. What is the price elasticity of demand coefficient for a good with perfectly inelastic demand?
18. If the price of Good Y increased from \$10 to \$12 and the quantity demanded decreased from 200 to 150, what is the price elasticity of demand coefficient? Show your work.

14. Draw an inelastic demand curve



15. Draw an elastic demand curve



19. Use the total revenue test to fill in the blanks with ↑ or ↓.

Inelastic Demand
Price ↑, TR
Price ↓, TR

Elastic Demand
Price ↑, TR
Price ↓, TR



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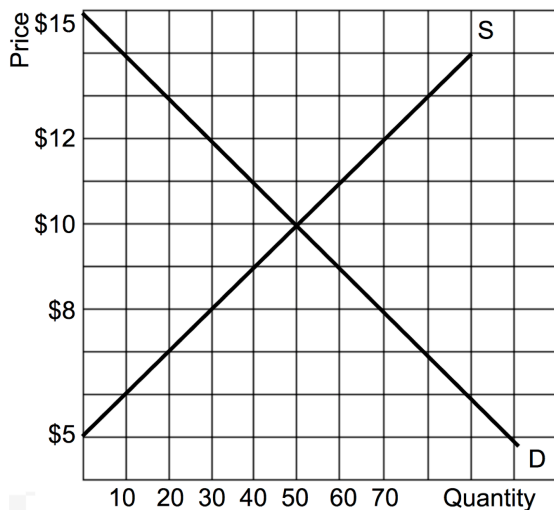
■ Topic 2.4- Price Elasticity of Supply

20. Identify the price elasticity of supply (PES) equation.
21. List three characteristics of goods with inelastic supply.
22. If the price of Good X increased from \$10 to \$15 and the quantity supplied increased from 200 to 250, what is the price elasticity of supply coefficient? Show your work.
23. True or False: The total revenue test cannot be used to determine if the supply is elastic or inelastic.

■ Topic 2.5- Other Elasticities

24. Cross-price elasticity of demand (XED) is used to determine if two goods are _____ or _____.
25. Identify the cross-price elasticity of demand (XED) equation.
26. Income elasticity of demand (YED) is used to determine if a good is _____ or _____.
27. Identify the income elasticity of demand (YED) equation.
28. True or False: If the income elasticity of Good X is .5 then it is an inferior good.
29. True or False: If the XED is positive for substitutes.

■ Topic 2.6- Equilibrium and Consumer and Producer Surplus



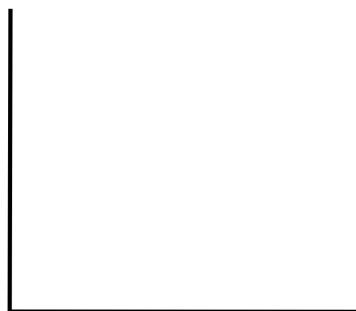
30. Define consumer surplus (CS).
31. Define producer surplus (PS).
32. Define deadweight loss (DWL).
33. Calculate the CS at the equilibrium price. Show your work.
34. Calculate the CS if the price was \$12. Show your work.
35. Calculate the deadweight loss if the market produced only 20 units.

■ Topic 2.7- Market Disequilibrium and Changes in Equilibrium

Graph #1



Graph #2



36. Draw a shortage on graph #1. Label the price (P1) and quantity supplied (Qs) and demanded (Qd).
37. Draw a surplus on graph #2. Label the price (P2) and quantity supplied (Qs) and demanded (Qd).
38. If market forces begin to return graph #2 to equilibrium the quantity demanded will _____ and quantity supplied will _____.

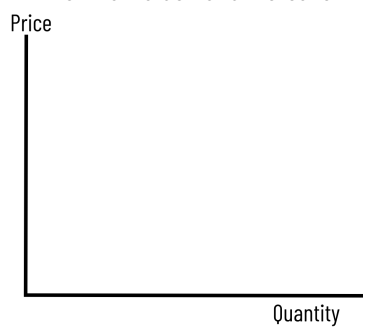
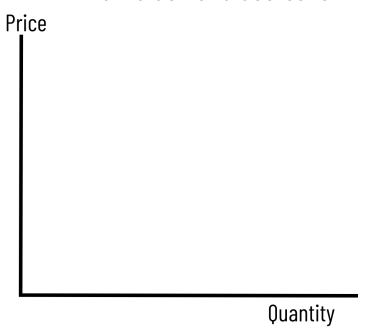
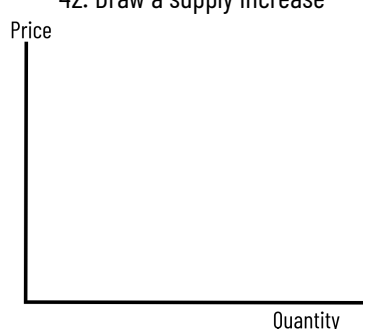

39. A change in _____ does not shift the demand curve or the supply curves. Instead, it moves along the curves.




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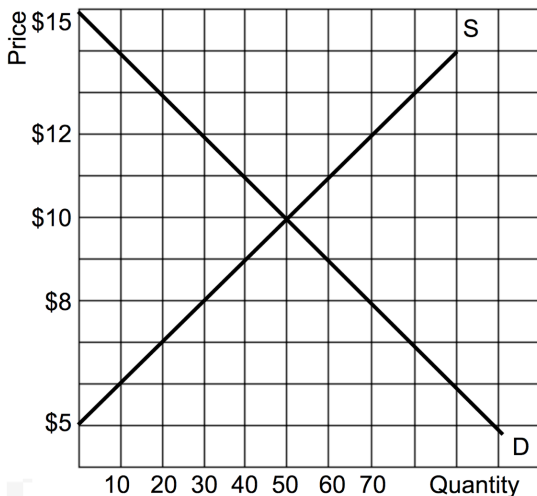
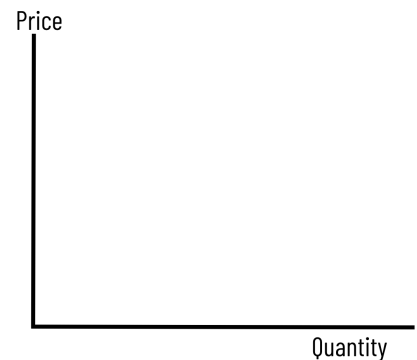
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■ Topic 2.7- Market Disequilibrium and Changes in Equilibrium (continued)

<p>40. Draw a demand increase</p> 	<p>41. Draw a demand decrease</p> 
<p>42. Draw a supply increase</p> 	<p>43. Draw a supply decrease</p> 

44. What is the double shift rule? 

45. Draw an increase in demand AND an increase in supply. What happens to the equilibrium price and quantity?



Use the market for pizza to the left to complete the following:

46. Calculate the amount of the shortage when the price is \$8.
47. Calculate the amount of the surplus when the price is \$11.
48. Identify a specific scenario that would cause the equilibrium price to increase and the equilibrium quantity to decrease.
49. Identify a specific scenario that would cause the equilibrium price and quantity to decrease.
50. Explain the difference between a change in demand and a change in quantity demanded.

51. For each scenario, identify the initial change (↑, ↓, or no change) in demand or supply, price, and quantity of electric cars.

Scenario	Demand	Supply	Price	Quantity
Increase in the price of gas-powered cars, a substitute for electric cars				
The effect on car manufactures from a significant increase in the price of labor				
Decrease in global incomes discourages foreigners from purchasing electric cars				
Decrease in the price of robotic technology used to produce electric cars				
A decrease in the number of companies manufacturing electric cars				



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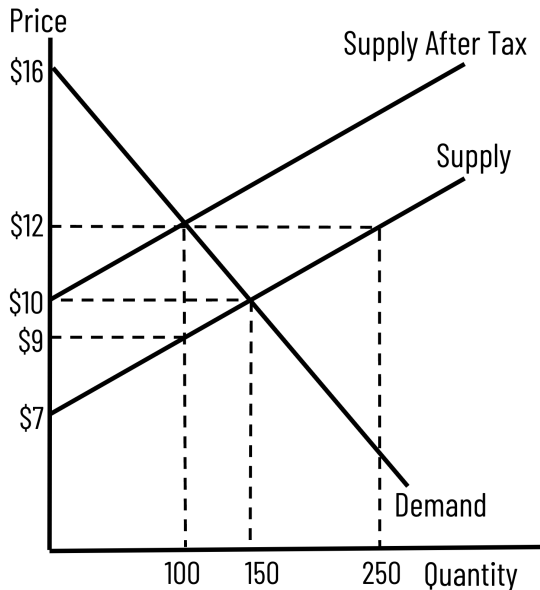
Topic 2.8- Government Intervention

52. What is a price ceiling?

53. A binding price ceiling must go _____ the equilibrium price and results in a _____.

54. What is a price floor?

55. A binding price floor must go _____ the equilibrium price and results in a _____.



Calculate the following assuming the equilibrium price is \$10.

- 56. Consumer surplus (CS).
- 57. Producer surplus (PS).
- 58. CS if a price ceiling is placed at \$12.
- 59. CS if a price floor is placed at \$12.

Calculate the following after the tax is imposed. Show your work.

- 60. The tax per unit.
- 61. CS after tax.
- 62. PS after tax.
- 63. Deadweight loss.
- 64. Total tax revenue.
- 65. Total spending by buyers.
- 66. Total revenue to sellers.
- 67. Total amount of tax buyers pay.
- 68. Total amount of tax sellers pay.

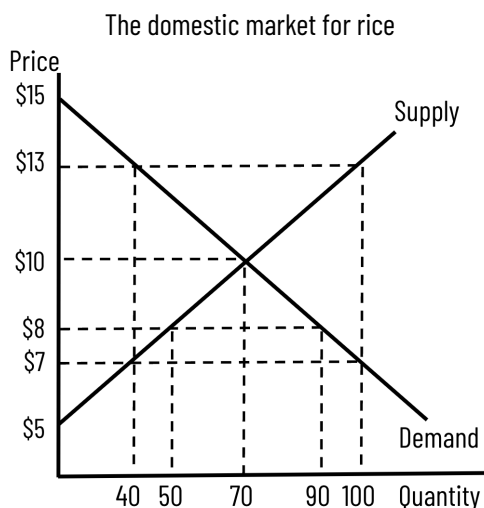
69. Is the demand curve between \$12 and \$10 elastic, inelastic, or unit elastic? Explain.

70. Calculate the elasticity of supply coefficient as price increases from \$10 to \$12. Show your work.

71. For each scenario, do buyers or sellers pay more of a tax?

Demand is more inelastic than supply	
Demand and supply have the same elasticity	
Supply is more inelastic than demand	
Demand is perfectly inelastic	
Supply is perfectly inelastic	

Topics 2.9- International Trade and Public Policy



Calculate the following at the equilibrium price. Show your work.

- 72. Consumer surplus.
 - 73. Producer surplus.
- Calculate the following if this country buys rice from other countries at the world price of \$7. Show your work.
- 74. Quantity produced domestically.
 - 75. Quantity imported.
 - 76. Consumer surplus.
 - 77. Producer surplus.

Identify the following if the government places a \$1 tariff on rice. Show your work.

- 78. Consumer surplus.
- 79. Tariff revenue.
- 80. Deadweight loss.