

## CH 3 Sample Exam Problems and Answers

**1. The most expensive private high schools in New York City cost close to \$60,000 a year to attend. That is MORE than it costs to attend some elite universities. What explains why the tuition is so high at these schools?**

- A) There is extremely high demand.
- B) There is a limited supply of highly prestigious schools.
- C) The demand is low, but supply is large.
- D) The demand is quite high, and the supply is quite low.

**2. Suppose that the price of Selena Gomez concerts increases from \$45 a ticket to \$80 a ticket. What will happen to the demand curve for her concerts?**

- A) It shifts to the left.
- B) It shifts to the right.
- C) Its slope increases.
- D) Nothing would happen to the demand curve; only the quantity demanded would fall.

**3. Cars and bicycles are substitutes. Which of the following is most likely to cause an increase in *demand for bicycles* (shift the curve to the right)?**

- A) An increase in the price of cars.
- B) A decrease in the price of cars.
- C) A decrease in the cost of the brakes used in making bicycles.
- D) A decrease in the price of bicycles.

**4. If the price of popcorn increases, what would you expect would happen to the market for popcorn?**

- A) There would be an upward movement along the demand curve.
- B) There would be a downward movement along the demand curve.
- C) The demand curve would shift to the left.
- D) The demand curve would shift to the right.

**5. Faux leather purses are considered inferior goods. What would happen to the equilibrium price and quantity of faux leather purses if income decreased and more firms started producing faux leather purses?**

- A) The equilibrium price will go up and the equilibrium quantity will go down.
- B) The equilibrium price will go up and the equilibrium quantity will go up.
- C) The equilibrium price will go down and the equilibrium quantity will be indeterminant.
- D) The equilibrium price will be indeterminant and the equilibrium quantity will go up.
- E) The equilibrium price will go up and the equilibrium quantity will be indeterminant.

**6. Consider a market in which the market demand is given by the equation  $Q_D = 44 - 3P$  and market supply is given by the equation  $Q_S = 2P + 4$ . If the price in the market is \$10, there is \_\_\_\_\_ in the market.**

- A) an equilibrium quantity of 24
- B) an equilibrium quantity of 14
- C) a surplus of 10
- D) a shortage of 14
- E) a shortage of 24

**7. The latest attendance figures at a theme park reveal that visitor numbers increased at the same time as the average ticket price went up. How could this have possibly happened?**

- A) There was an increase in demand and no change in supply.
- B) There was a decrease in demand and an increase in supply.
- C) There was no change in demand and an increase in supply.
- D) There was a decrease in demand and no change in supply.
- E) This violates the law of demand. The number of visitors should fall when ticket prices rise.

**8. Consider a demand curve for ground beef. We move *along* the demand curve when**

- A) the price of hamburger buns increases
- B) when a news report comes out saying that ground beef cures cancer
- C) the price of ground beef changes
- D) the price of ground turkey decreases

**9. Consider a demand curve for tortilla chips. If the price of salsa decreases while the price of tortilla chips stays the same, then I would consume more tortilla chips because.**

- A) salsa is an inferior good
- B) salsa is a normal good
- C) tortilla chips and salsa are complements
- D) tortilla chips and salsa are substitutes

**10. Which of the following is most likely to shift the demand curve for a good to the right (outward)?**

- A) A decrease in the cost of production of the good
- B) The introduction of a new technology that lowers the cost of producing the good.
- C) A decrease in the price of the good
- D) An increase in the price of a substitute good
- E) An increase in the price of a complement good

**11. Which of the following is most likely to increase the equilibrium price charged and increase the equilibrium quantity of customers at Dunkin Donuts?**

- A) An increase in prices at Starbucks, a competitor one block away.
- B) A new technology that makes it cheaper to mass-produce donuts.
- C) An increase in the rent paid by Dunkin Donuts.
- D) Starbucks decides to renovate, expand and offer a better experience at lower prices.

**12. Which of the following would cause an increase in the price of gasoline and an expansion in the equilibrium quantity?**

- A) an increase in the price of crude oil, a key ingredient required for the production of gasoline
- B) the introduction of a miracle engine that substantially improves the gas mileage of automobiles
- C) a recession that substantially reduces the income of households
- D) an increase in the popularity and use of Sport Utility Vehicles that consume a lot of gasoline per mile driven

**13. If the cost of the components used to make the PS4 suddenly increases, what will happen to the demand curve for PS4's?**

- A) shifts to the left
- B) it becomes upward sloping
- C) shifts to the right
- D) nothing happens to the demand for the PS4.

**14. If there is a shortage of a good at the current price, we expect that**

- A) the supply curve for the good will shift to the left.
- B) the demand curve for the good will shift to the right.
- C) the price of the good will rise.
- D) the price of the good will fall.
- E) the price of the good will stay the same.

**15. If we define an equation for demand,  $Q_d = 240 - 12P$  and a equation for supply,  $Q_s = 60 + 6P$ . Determine the equilibrium price and output in the market.**

**16. The market for Snickers has a demand function,  $Q_d = 10 - 7P$  and supply function,  $Q_s = -1 + 4P$ . Determine the equilibrium price and quantity sold in this market.**

**17. Match the statements on the left with the correct answer on the right by drawing a line between them:**

**Match These**

- A. The price increases
- B. Cowboy boots are the in thing
- C. A new technology is developed
- D. The cost of labor rises

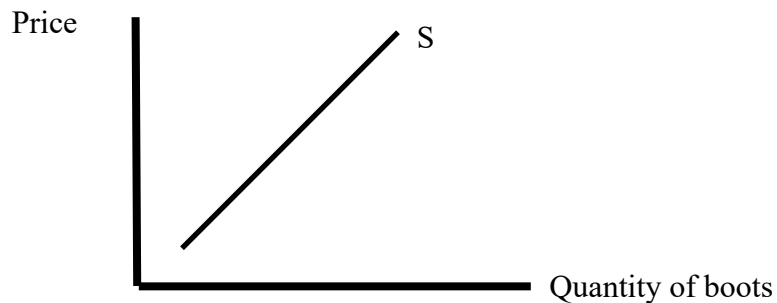
**With These**

- 1. The supply curve shifts out
- 2. Slide along the demand curve
- 3. The supply curve shifts in
- 4. The demand curve shifts out

**18. Which of these is ENDOGENOUS in the supply and demand model?**

- A) income
- B) the price of related goods
- C) price

**19. On the following graph show (either by drawing an arrow along the existing supply curve or drawing a new supply curve) how an increase in the price of gasoline affects the current supply of boots.**



**20. The following picture shows a case of Bud Light with ping pong balls being sold nearby. If the price of Bud Light rises, what will happen to the demand for ping pong balls?**



- A) the demand for ping pong balls will increase
- B) the demand for ping pong balls will decrease
- C) the demand for ping pong balls will increase on hot days
- D) the demand for ping pong balls will decrease because you don't have any paddles to use.
- E) nothing happens to the demand for ping pong balls

**21. Due to new regulations an oil company is forced to meet stricter refining standards. How will these regulations change the market price and quantity?**

- A) The price will rise and the quantity will fall.
- B) The price will fall and the quantity will rise.
- C) The price and quantity will both rise.
- D) The price and quantity will both fall.
- E) The price will rise, and the quantity will be indeterminate.

**22. What would happen to the price and quantity sold of Dr. Pepper (a normal good) if income decreased?**

- A) Equilibrium price will go up and equilibrium quantity will go down.
- B) Equilibrium price will go up and equilibrium quantity will go up.
- C) Equilibrium price will go down and equilibrium quantity will go down.
- D) Equilibrium price will go down and equilibrium quantity will go up.

**23. In the supply and demand model which of the following is an endogenous factor?**

- A) Quantity
- B) The price of related goods
- C) Income
- D) Technology

**24. Match the statements on the left with the correct answer on the right by drawing a line between them:**

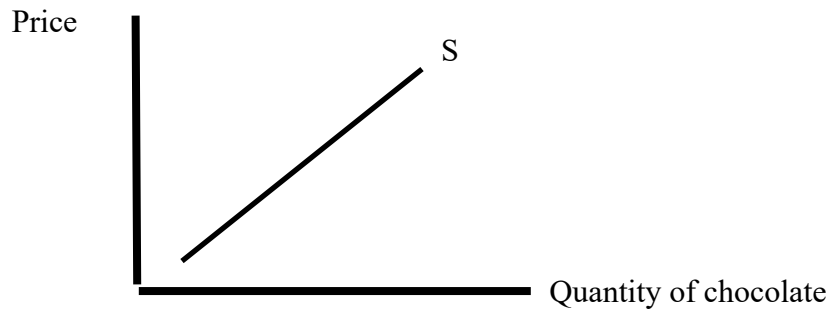
**Match These**

- A. The price decreases
- B. The price of a complement falls
- C. A firm receives a subsidy
- D. The cost of labor rises

**With These**

- 1. The supply curve shifts in
- 2. Slide along the demand curve
- 3. The demand curve shifts out
- 4. The supply curve shifts out

**25. On the following graph show (either by drawing an arrow along the existing supply curve or drawing a new supply curve) how a decrease in the price of cacao (an ingredient used in making chocolate) affects the current supply of chocolate.**



**26. Answer the following questions about a market that is perfectly competitive:**

- A) If the price is above the equilibrium price, would there be a shortage or a surplus?
- B) What will happen if the price is below the equilibrium price?
- C) During a shortage, how does the market respond until it once again reaches equilibrium?

**27. If the U.S. government enacts a new tariff (a tax) on the tortillas imported from Mexico, what will happen to the price of tortillas made in the United States?**

- A) The price of tortillas made in the U.S. will rise.
- B) The price of tortillas made in the U.S. will fall.
- C) The price of tortillas made in the U.S. will not change.
- D) The price of tortillas made in the U.S. will fall if the economy is in a recession but rise if the economy is in an expansion.

**28. Using a supply and demand model, show what happens to the equilibrium price and equilibrium quantity in the market for bananas if, holding all else constant, a study comes out that says eating bananas causes cardiac problems.**

29. For each of the following, draw a diagram that illustrates the likely effect on the market for eggs. Indicate in each case the impact on equilibrium price and equilibrium quantity.

- a. A surgeon general warning that high-cholesterol foods can cause heart attacks.
- b. A decrease in the price of bacon, a complementary product.
- c. An increase in the price of chicken feed.
- d. Caesar salad becomes popular at dinner parties. (The dressing is made with raw eggs.)
- e. A technological innovation that reduces egg breakage during packing.

30. Consider the market for high-definition televisions (HDTVs).

- a. Scenario 1: Using a supply and demand graph, show what will happen to the current equilibrium price and quantity of HDTVs if people expect the price of HDTVs to fall in the future.
- b. Scenario 2: Now, using a second supply and demand graph, show instead what will happen to the equilibrium price and quantity of HDTVs if the price of streaming services declines.
- c. Scenario 3: You observe that the price of HDTVs increases. Can you definitively conclude that there has been an increase in demand? If not, what besides an increase in demand could explain the price increase?

31. Consider the market for beer.

- a. Use a simple supply and demand graph to show the equilibrium price ( $P^*$ ) and quantity ( $Q^*$ ) of beer. Clearly label the supply curve, the demand curve, and the axes.
- b. Recently, the beer industry has been hit by a shortage of hops, which are used to make beer. At the same time, consumer income has been steadily increasing. On your graph, illustrate what will happen to the equilibrium price and quantity of beer as a result of the shortage of hops and the increase in consumer income. If you need to make additional assumptions in order to answer this question, clearly state what those assumptions are.

Price	Quantity of bacon cheeseburgers demanded	Quantity of bacon cheeseburgers supplied
\$24	0	60
\$20	20	50
\$16	40	40
\$12	60	30
\$8	80	20

\$4	100	10
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**32. The table below provides information for the demand and supply of bacon cheeseburgers.**

**Draw the demand and supply curves. Each curve should be drawn as a single line.**

**a. If the price of bacon cheeseburgers is currently \$20, there is \_\_\_\_\_.**

**b. If the price of bacon cheeseburgers is currently \$8, there is \_\_\_\_\_.**

**c. At the market equilibrium price, bacon cheeseburgers are exchanged. (Give your answer to the nearest whole number.)**