

Chapter 3 Assignment

1. The law of demand states that, other things equal:
 - a. as the price increases, the quantity demanded will increase.
 - b. as the price decreases, the demand curve will shift to the right.
 - c. as the price increases, the demand will decrease.
 - d. ☒ as the price increases, the quantity demanded will decrease.
2. Which of the following factors causes a movement along the demand curve?
 - a. ☒ change in the price of related goods
 - b. ☒ change in the price of the good
 - c. change in the population
 - d. both b and c
3. If goods A and B are substitutes, a decrease in the price of good B will:
 - a. increase demand for good A.
 - b. increase demand for good B.
 - c. decrease demand for good A.
 - d. ☒ both b and c.
4. If goods A and Z are complements, an increase in the price of good Z will:
 - a. increase demand for good A.
 - b. decrease demand for good A.
 - c. decrease demand for good Z.
 - d. ☒ both b and c.
5. When the economy suffers a downturn, vacationers are more likely to take car trips than to fly. Which of the following provides the most reasonable explanation for this phenomenon?
 - a. Air travel and vacation travel by car are complementary goods.

- b. Air travel and vacation travel by car are both normal goods.
 - ☒ c. Air travel is a normal good and vacation travel by car is an inferior good.
 - d. Air travel is an inferior good and vacation travel by car is a normal good.

- 6. A good is normal if:
 - a. when income increases, demand remains unchanged.
 - b. when income increases, demand decreases.
 - ☒ c. when income increases, demand increases.
 - d. none of the above

- 7. A good is inferior if:
 - a. when income increases, demand remains unchanged.
 - ☒ b. when income increases, demand decreases.
 - c. when income increases, demand increases.
 - d. none of the above

- 8. The law of supply says:
 - a. other things equal, the quantity supplied for a good is inversely related to the price of a good.
 - b. other things equal, supply of the good creates its own demand for the good.
 - ☒ c. other things equal, the quantity supplied for a good is positively related to the price of a good.
 - d. none of the above.

- 9. Which of the following will NOT cause an increase in the supply of cornflakes?
 - a. an increase in the price of cornflakes
 - b. a cost-saving improvement in the technology of corn production
 - c. a reduction in the price of corn
 - ☒ d. the expectation by producers that the price of cornflakes will fall in the future, because they anticipate the release of a government report that claims that oat bran is healthier than
 - e. cornflakes

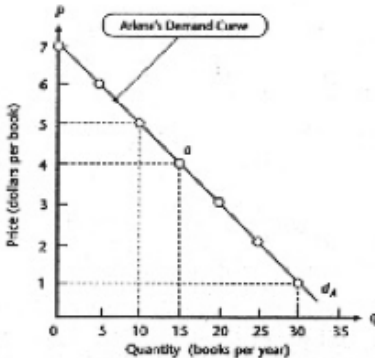
- 10. Consider the supply curve for cotton shirts. An increase in the price of cotton will:
 - ☒ a. increase supply of cotton shirts.
 - b. decrease supply of cotton shirts.

- c. not shift the supply curve for cotton shirts.
 - d. decrease demand for cotton shirts.
- 11. A major input into vanilla ice cream is cream. An increase in the cost of purchasing dairy cows in Ontario would result in which of the following?
 - a. An increase in the supply of vanilla ice cream.
 - b. A decrease in quantity supplied of vanilla ice cream and lower prices.
 - c. An increase in demand for vanilla ice cream and higher prices.
 - ☒ d. A decrease in the supply of vanilla ice cream, higher prices, and a decrease in the equilibrium quantity.
- 12. The market for soybeans is initially in equilibrium. Because of "mad cow" disease, producers decide to replace bone meal with soybeans in cattle feed. The likely effect is that:
 - ☒ a. the equilibrium price and quantity of soybeans will rise.
 - b. the equilibrium price and quantity of soybeans will fall.
 - c. the equilibrium quantity of soybeans will rise, but we can't determine what will happen to the equilibrium price.
 - d. the equilibrium price of soybeans will rise, but we can't determine what will happen to the equilibrium quantity.
- 13. Assume that corn is an input in the production of beef, but NOT in the production of pork. Further, beef and pork are substitutes. A decrease in the price of corn will:
 - a. increase the supply of beef and increase the demand for pork.
 - b. decrease the supply of beef and increase the demand for pork.
 - c. decrease the supply of beef and decrease the demand for pork.
 - ☒ d. increase the supply of beef and decrease the demand for pork.
- 14. French fries and hamburgers are complements. Suppose that the cost of the ingredients used to make hamburgers rises, so that the price of a hamburger rises. Then, the equilibrium relative price of French fries ____ and the equilibrium quantity ____.
 - a. rises; increases
 - b. rises; decreases
 - c. falls; increases
 - ☒ d. falls; decreases

15. Which direction will the demand curve shift for small cars, such as the Smart Car, when the

following events occur? Answer *right* or *left*.

- Small cars become more trendy. right
 - The price of large cars increases. right
 - Average incomes decrease and small cars are an inferior good. right
 - Consumers anticipate that the price of small cars will decrease in the near future. left
 - The price of gasoline decreases substantially. right
16. Below is a graph of Arlene's demand for books.



- If books are \$5 each, how many will Arlene buy? 10
 - At what price would Arlene be willing to buy 20 books? 3
 - What is an example of a change in Arlene's life that would make her buy more than 20 books at the price in (b)?
Her income increases
- d.

17. Indicate using an X the effect of the following events on demand for TEA.

Event	Movement UP	Movement DOWN	Shift RIGHT	Shift LEFT
The price of tea increases		✓		
The price of coffee increases			✓	
A health report is released that reveals the health benefits of drinking tea			✓	
Average household incomes decrease because of an economic recession, and tea is a normal good				✓
Consumers expect the price of tea to decrease next month				✓

18. Demand is given by the following equation: $P = 20 - 0.1Q$. Answer the following questions:

Graph the demand curve.



What is the quantity demanded if the price is \$5?

$$Q = \underline{150}$$

At what price would the quantity demanded be 60?

$$P = \underline{14}$$

19. Indicate using an X the effect of the following events on supply of ICE CREAM.

Event	Movement UP	Movement DOWN	Shift RIGHT	Shift LEFT
The price of cream, the main ingredient, decreases			✓	
Technology used for processing ice cream improves			✓	
Disease kills off a large portion of cows				✓
The price of ice cream decreases		✓		
The price of yogurt, a substitute in production, increases			✓	

20. Below is a demand and supply schedule for bananas.

Price per kg	Quantity Demanded (kgs)	Quantity Supplied (kgs)
1.00	60	20
1.50	50	30

2.00	40	40
2.50	30	50
3.00	20	60
3.50	10	70
4.00	0	80

a) At a price of \$1.00/kg will there be a shortage or a surplus? shortage Of how much?

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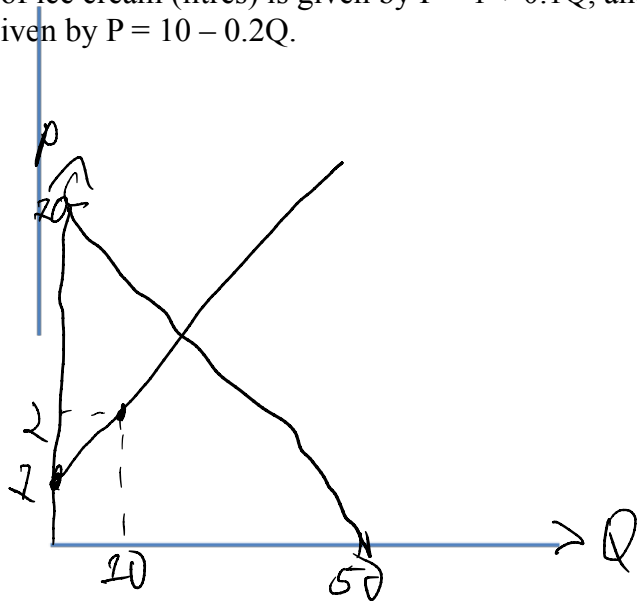
b) At a price of \$3.50/kg will there be a shortage or a surplus? surplus Of how much?

30

c) What is the equilibrium price? \$2.00/kg

d) The equilibrium quantity? 40

21. Supply of ice cream (litres) is given by $P = 1 + 0.1Q$, and demand is given by $P = 10 - 0.2Q$.



a. What would the quantity supplied be at a price of \$8? 70

b. What would be the quantity demanded at a price of

\$8? 10

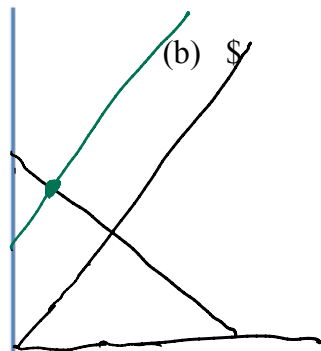
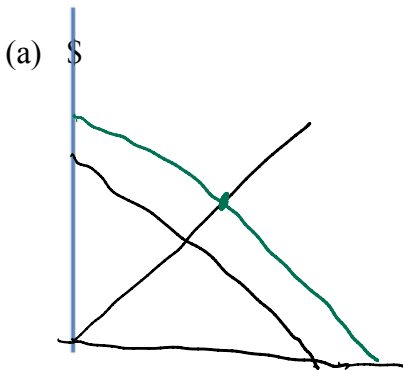
c. What situation would exist in the market at a price of \$8? surplus

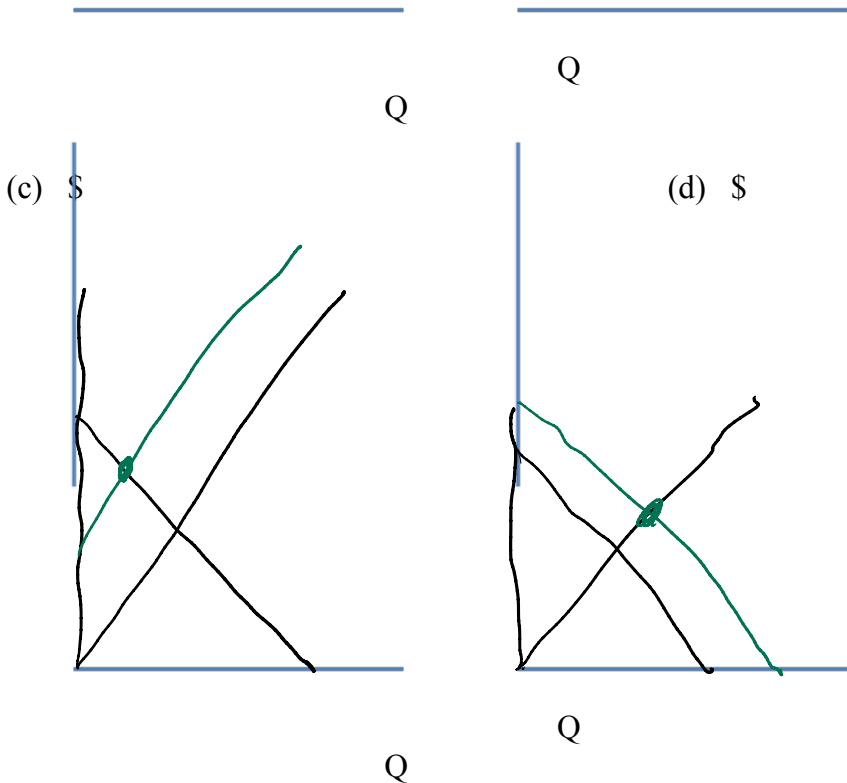
d. Calculate the equilibrium price and quantity.

30 P = 7 Q =

22. Show how the following events will affect the market for canned tomatoes. Show the initial equilibrium price and quantity and the new equilibrium price and quantity.

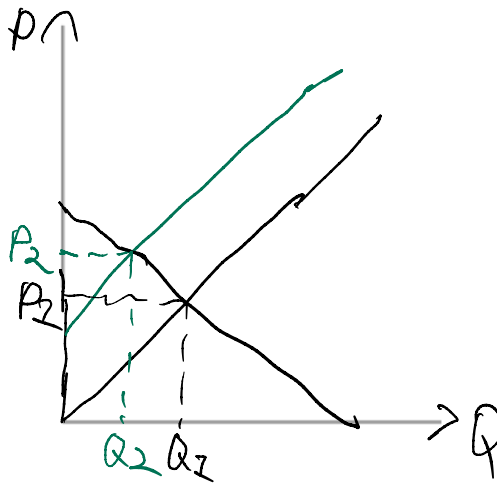
- Canned tomatoes are an inferior good and incomes increase.
- Canned pumpkin is a substitute in production and demand for canned pumpkin has increased.
- The weather has been very dry and many farmers have had to pay for water to be shipped to their farms.
- Spaghetti noodles are a complement in consumption and the price of spaghetti noodles increases.





23. In each of the following markets, show on the graph what will happen, if anything, to supply and demand, and how the new equilibrium price and quantity compare to the initial equilibrium price and output. Be sure to include P_1^* , Q_1^* and P_2^* , Q_2^* in your diagram.

- Milk: a ban on the use of certain hormones for cows radically lowers the amount of milk each cow produces.



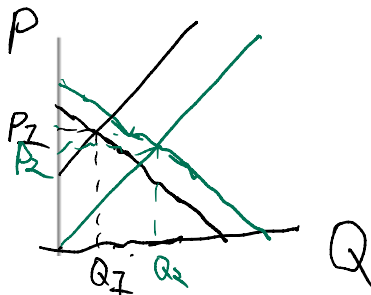
Circle the correct changes: Supply: increase, decrease, no change

Demand: increase, decrease, no change

Equilibrium price: increase, decrease, no change, cannot determine

Equilibrium quantity: increase, decrease, no change, cannot determine

- b) Economists: more colleges require students to take an economics class (taught by economists), while universities graduate more economists with Ph.D. degrees.



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Demand: increase, decrease, no change

Equilibrium price: increase, decrease, no change,
cannot determine

Equilibrium quantity: increase, decrease, no change,
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