

Econ 211 Problem Set 2 Answer Key

1. A change in demand refers to a shift of the entire demand curve and is due to changes in, among other things, consumer income, prices of related goods (substitutes and complements), price expectations, and the number of buyers. A movement along the demand curve is only caused by a change in the price of the product itself.

2. Terminology

- a) Incorrect: A fare war (ie., price cuts) will cause the quantity demanded to increase (which is a movement down along the given demand curve).
- b) Correct: A change in income will shift the entire demand curve.

3. Computer market

- a) Supply shifts left: P rises; Q falls
- b) Demand shifts right: P rises; Q rises
- c) Supply shifts right: P falls; Q rises
- d) Demand shifts left: P falls; Q falls (assuming computers are a normal good)
- e) Supply shifts right; Demand shifts right: P ???; Q rises
- f) Demand shifts left; Supply shifts left: P ???; Q falls

4. Hamburger Market

- a) Demand shifts right: P rises; Q rises
- b) Demand shifts left: P falls; Q falls (assuming that buns are a complement for hamburger)
- c) Supply shifts left: P rises; Q falls
- d) Supply shifts left: P rises; Q falls
- e) Demand shifts right; Supply shifts left: P rises; Q ???
- f) Supply shifts left; Demand shifts left: P ???; Q falls

5. Automobile Market

- a) Supply shifts right: P falls; Q rises (input price becomes cheaper)
- b) Demand shifts left: P falls; Q falls (gasoline is a complement in consumption)
- c) Supply shifts left: P rises; Q falls (input price is more expensive)
- d) Demand shifts right: P rises; Q rises
- e) Supply shifts left; Demand shifts left: P ???; Q falls
- f) Supply shifts right; Demand shifts right: P ???; Q rises

6. Supply must have increased.

7. Supply must have decreased.

8. Supply must have increased. Perhaps the price of production materials decreased.

9. Supply and Demand:

- a) the supply curve has also shifted to the right
- b) the demand curve has increased
- c) The demand for rental housing will probably decrease due to the exit of the major employers.

This will then cause the equilibrium price of rental housing to fall and the quantity to fall.
d) The demand for cotton probably fell, thus pulling down the price and quantity of cotton.

10. This is for you to ponder.

11. Compact disc market

a) See the graphs we drew in class.

b) $P = \$20$; $Q = 8$

c) $CS = \$260$; $PS = \$75$; $SW = CS + PS = \$335$

d) $Q_d = 14$; $Q_s = 5$; shortage of 9 units; $CS = \$210$; $PS = \$50$; $SW = \$260$.

e) $Q_d = 4$; $Q_s = 15$; surplus of 11 units; $CS = \$40$; $PS = \$180$; $SW = \$220$

12. The price of water has gone up for two reasons: there has been an increase in demand (due to an influx of people and bigger swimming pools) and a decrease in supply (due to the drought). To determine which set of analysts had described the dominant cause, you must know what happened to the equilibrium quantity of water traded. If the increase in demand was the dominant cause, we would expect to see more water traded on the market. If the drought was the cause, we would expect to see less water traded on the market. Thus, the answer depends on which curve shifted the most.

13. Ignore #13.

14. Film market.

a) From July to August the demand for film increased (due to the lower price of photo developing). The higher demand explains why the price of film rose to \$3 and the quantity rose to 150.

b) From August to September two things happened: the demand fell back to its original July position (due to the lower price of photo developing) and the supply curve shifted backwards (due to the higher cost of labor). The combination of these changes resulted in a higher film price of \$4 and a lower quantity traded of 75.

15. This is for you to ponder.

16. Sandwich market.

a) 200 sandwiches

b) $CS = \$400$

c) $PS = \$400$

d) $DWL = \$200$

e) Rationing sandwiches may be viewed as fair on the "fair results" principle because everyone has an equal number of sandwiches. On the other hand, because Sandwiches To Go is restricting the number of sandwiches, some customers are likely to go without. If the "fair results" view incorporates these consumers into the picture, then the rationing is unfair because not every customer has a sandwich. The "fair rules" approach is likely to consider rationing fair, because all exchanges are voluntary. But it is worth noting that Sandwiches To Go is acting like a monopoly by restricting its production and thereby creating deadweight loss.

17. There is no #17.

18. A shortage occurs whenever the quantity demanded is greater than the quantity supplied at a given price. Except for covering certain medical expenses, it is illegal for money to change hands between the birth mother and adoptive parents. Thus, the price of an adopted baby is regulated to be essentially zero. Adopted children must be allocated by some non-price method such as the financial stability or racial background of the adopted parent(s).

19. This is for you to ponder.

20. Check your notes.

21. Consumers do end up paying for some of the agricultural subsidies that farmers enjoy through higher food prices. Taxpayers, however, also end up paying more to help support farmers since the government will need to raise revenue from somebody in order to buy up the surpluses caused by the price floor.

22. This is for you to ponder.

23. Labor Market.

a) $W = \$5$; Employment = 24; No unemployment.

b) $Q_d = 20$; $Q_s = 26$; Unemployment is 6 million hours per week.

24. Market for beer.

a) Set $Q_d = Q_s$ and solve for P.

$$P = \$42$$

$$Q = 9 \text{ million barrels}$$

b) CS = \$81 million; PS = \$162 million