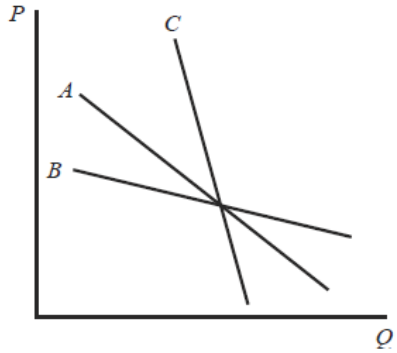
Homework 3

Due Date: Nov-1/2-2018

I. Multiple Choice Questions

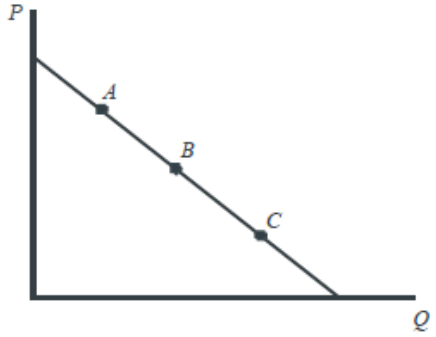
1. Which of the following might explain why farm revenues are higher in years of lower production due to bad weather?
A) Demand is more elastic than supply.
B) Supply is perfectly elastic.
C) Demand is relatively inelastic; a leftward shift in supply will increase total revenue.
D) Supply is relatively inelastic; a leftward shift in supply will increase total revenue.
E) None of the above.

2. Rank the demand curves in the figure below in order of greatest to least price elasticity of demand at their in common intersection point.



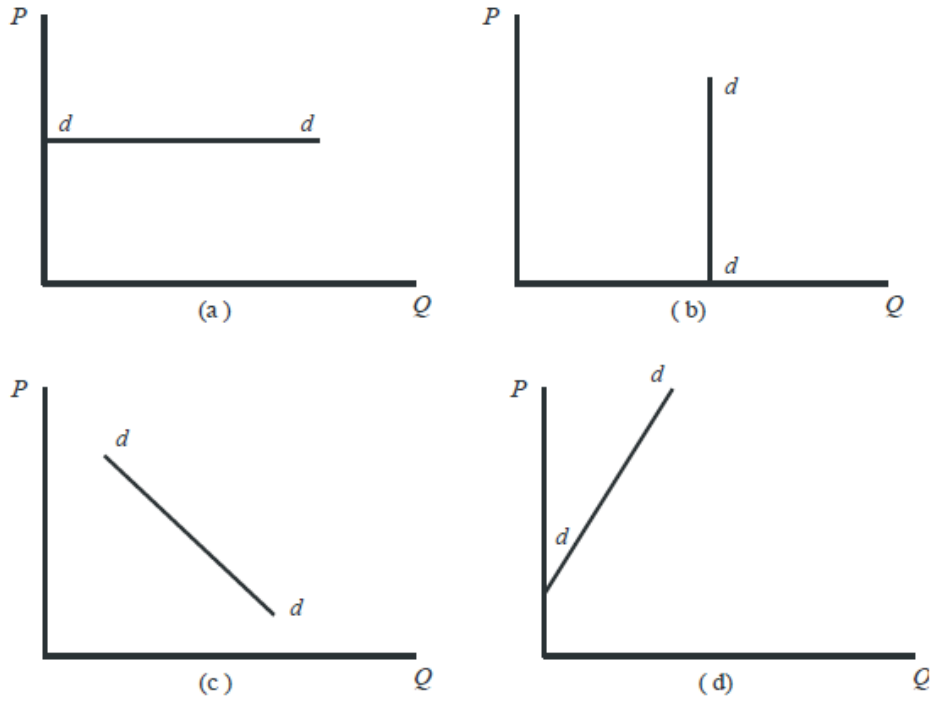
A) A, B, C.
B) B, C, A.
C) B, A, C.
D) C, A, B.
E) none of the above.

3. Rank the points A, B and C on the demand curve in the figure below in order of greatest to least elasticity of demand.



A) C, A, B.
B) B, A, C.
C) A, B, C.
D) They are of equal elasticity.
E) More information is needed.

4. The government has declared that they will purchase every bushel of wheat you can produce, at the price of $15 per bushel. Which of the diagrams shows the government's demand curve?

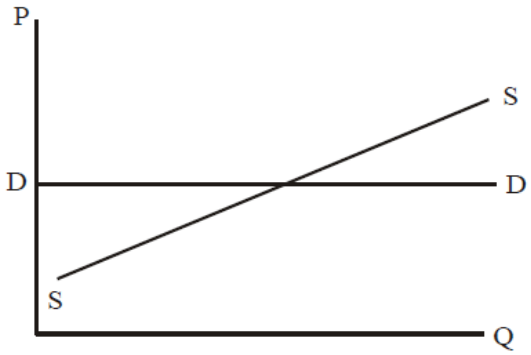


A) a.
B) b.
C) c.
D) d.
E) None of these diagrams.

5. If the burden of an excise tax is shifted forward completely onto the consumer, we can say that:
A) supply is perfectly price elastic.
B) demand is perfectly price elastic.
C) demand is more price elastic than supply.
D) supply is price inelastic and demand is price elastic.
E) none of the above.

6. How is it possible for a corn farmer to have a bumper crop season and yet make less income?
A) demand for corn is elastic.
B) demand for corn is inelastic.
C) demand for corn is unit elastic.
D) corn has lots of substitutes.

7. Given the supply and demand curves shown in the figure below, a $1 tax on sales should be expected to cause:



A) price to increase by $1 with quantity unchanged.
B) quantity to fall with price left unchanged.
C) no change in either price or quantity.
D) price to rise and quantity to fall.
E) quantity to increase with price left unchanged.

8. Consider the following quotation: "Price adjustments serve to keep the quantities supplied and demanded equal. If, at some initial price, there is excess demand, then the price will rise. The price increase has two effects: it tends to shift the demand curve down because people are willing to buy a smaller quantity at a higher price, and it tends to shift the supply curve up because producers find it profitable to produce a greater output at a higher price. The price will adjust until there is no excess demand."

A) The analysis in the quotation is correct.

B) The quotation confuses shifts in curves with movements along the curve.

C) The quotation is free of logical error but does not describe the way prices behave in actual, competitive markets.

D) The quotation would be correct if "excess supply" were substituted for "excess

demand."

E) None of the above.

9. Recently a railroad asked the state commerce commission for permission to increase its commuter rates by 20 percent. The railroad argued that declining revenues made this rate increase essential. Opponents of the rate increase contended that the railroad's revenues would fall because of the rate hike. It can be concluded that:

A) the railroad felt that the demand for passenger service was elastic and the opponents of the rate increase felt it was inelastic.

B) the railroad felt that the demand for passenger service was inelastic and the opponents of the rate increase felt it was elastic.

C) both groups felt that the demand was inelastic but for different reasons.

D) both groups felt that the demand was elastic but for different reasons.

E) both groups felt that the demand was inelastic for the same reason.

10. A price subsidy of 20 cents per gallon on milk (which does not have a perfectly inelastic demand curve) will result in a:

A) change in consumer tastes.

B) decrease in the equilibrium price of 20 cents per gallon.

C) decrease in the equilibrium price of less than 20 cents per gallon.

D) decrease in the equilibrium price of more than 20 cents per gallon.

11. A "production function" is the name for:

A) a working part.

B) a relationship between inputs and output.

C) technological change.

D) all of the above.

E) none of the above.

12. The marginal product of labor is the:

A) output which it could produce unaided by machinery or other factors of production.

B) extra revenue which a firm will get by selling the output of one additional worker.

C) amount of extra output that is produced when one extra worker is added to a fixed amount of other factors.

D) amount of extra output that is produced when one worker is added and other factors of production are increased proportionately.

E) none of the above.

13. The law of diminishing marginal returns shows us which of the following:

A) the marginal product of each unit of input will decline as that input increases and other inputs remain constant.

B) the marginal product of labor just equals the marginal utility of leisure.

C) more workers employed in a plant will talk more and produce less.

D) total product must eventually fall.

E) returns to scale are diminishing.

Total Product with Various Input Combinations

	Land		
Labor	10	15	20
0	0	0	0
1	20	20.67	20.5
2	38	39.33	40.0
3	54	57.00	58.5
4	68	72.67	76.0
5	80	87.33	92.5
6	90	102.00	108.0

14. Suppose that production is defined by the function recorded in the table above. The marginal product of the 4th unit of labor, given 20 units of land, is equal to:

A) 15.5

B) 17.5

C) 19.0

D) 1.5

E) none of the above

15. The short run is a period of time so short that:

A) output cannot be varied.

B) at least one input is fixed.

C) all inputs are fixed.

D) all inputs are variable.

E) none of the above.

16. Consider an accounting firm which hires workers to enter data into a computer program. Which of the following would be considered a short run decision?

A) The firm would like to hire ten more workers for a weekend shift.

B) The firm is considering an investment in additional computers.

C) The firm would like to build its own facility.

D) The firm might purchase new computer software that would require some new computer hardware as well as extensive training for workers.

E) All of the above decisions could be made in the short run.

17. For the law of diminishing returns to hold, the missing blank in this table must be:

Quantity of Labor	Total Product
0	0
1	-
2	8

A) 4.

B) 2.

C) more than 4.

D) less than 4.

E) 0.

18. If production displays diminishing returns for all inputs, then:

A) it must also display constant returns to scale.

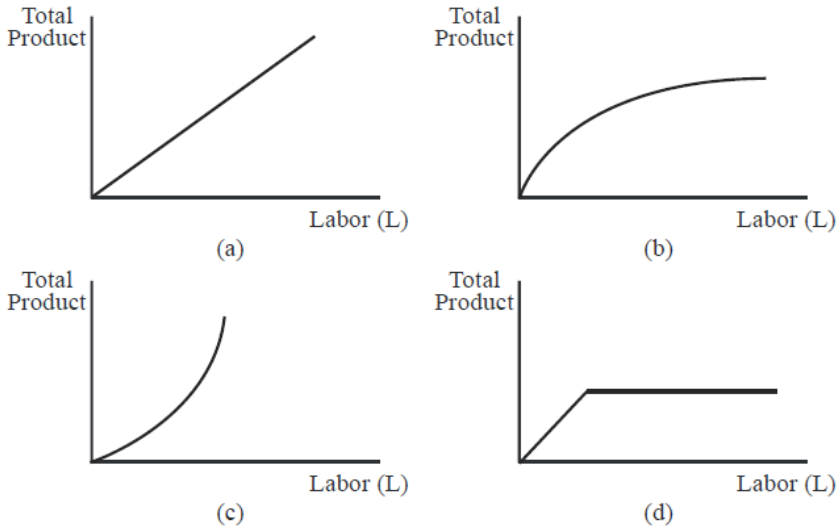
B) it must also display increasing returns to scale.

C) it must also display decreasing returns to scale.

D) total product need never decline.

E) any of the above might apply.

19. Suppose that production of a particular good requires two inputs, labor (L) and capital (K). If K is fixed, which of the panels in the figure below possibly represent(s) decreasing marginal productivity of labor?



A) Panel a.
B) Panel b.
C) Panel c.
D) All of the above.
E) None of the above.

20. Suppose a producer employs 2 units of Capital, K, and 2 units of labor, L, for the production of output = 100. If that producer wants to double production, how many more units of K and L should be employed?

A) 4 K and 4 L if production shows IRS. B) 2 K and 2 L if production shows CRS.

C) 2 K and 2 L if production shows IRS. D) 4 K and 4 L if production shows CRS.

E) none of the above.

II. Short Answers

21. Question 4, “Questions for Discussion”, Chapter 4 of the textbook.

22. Question 9, “Questions for Discussion”, Chapter 4 of the textbook.

23. Question 2, “Questions for Discussion”, Chapter 6 of the textbook.

24. Question 7, “Questions for Discussion”, Chapter 6 of the textbook.

25. Question 8, “Questions for Discussion”, Chapter 6 of the textbook.