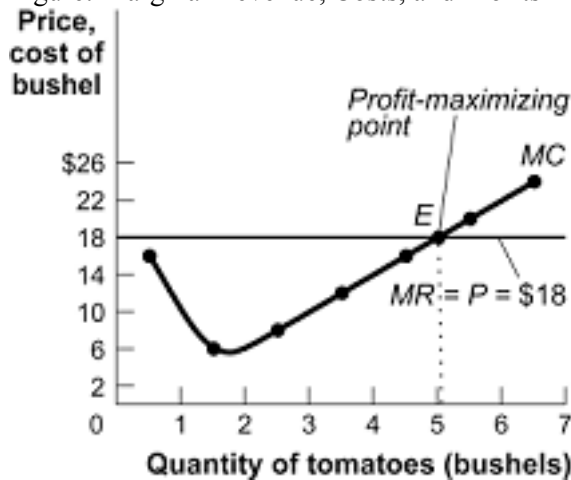


Chapter 12 Assignment

1. If an Ontario strawberry wholesaler is in a perfectly competitive market, that wholesaler will have a _____ share of the market, and consumers will consider her strawberries to be _____. Therefore, _____ advertising will take place in this market.
A) large; standardized; no
B) small; standardized; little, if any
C) small; differentiated; no
D) large; differentiated; extensive
2. All EXCEPT one of the following are characteristics of perfect competition. Which is the exception?
A) All firms produce the same standardized product.
B) There are many producers and each has only a small market share.
C) There are many producers; one firm has a 25% market share, and all the remaining firms have a market share of less than 2% each.
D) There are no obstacles to entry into or exit from the industry.
3. If all firms in an industry are price-takers, then:
A) each firm can take the price that it wants to charge and sell at this price, provided it is not too different from the prices other firms are charging.
B) each firm takes the market price as given for its current output level, recognizing that the price will change if it alters its output significantly.
C) an individual firm cannot alter the market price even if it doubles its output.
D) the market sets the price, and each firm can take it or leave it (by setting a different price).
4. In a perfectly competitive industry, the market demand curve is usually:
A) perfectly inelastic.
B) perfectly elastic.
C) downward sloping.
D) relatively elastic.
5. 5. For a perfectly competitive firm, marginal revenue:
A) is less than price.
B) is greater than price.
C) decreases as the firm increases output.
D) is equal to price.

Use the following to answer questions 6-7.

Figure: Marginal Revenue, Costs, and Profits



6. (Figure: Marginal Revenue, Costs, and Profits) In the accompanying figure, if market price increases to \$20, marginal revenue _____ and profit-maximizing output _____.
 - A) increases; increases
 - B) increases; decreases
 - C) decreases; increases
 - D) decreases; decreases

7. (Figure: Marginal Revenue, Costs, and Profits) In the accompanying figure, if market price decreases to \$16, marginal revenue _____ and profit-maximizing output _____.
 - A) increases; decreases
 - B) increases; increases
 - C) decreases; increases
 - D) decreases; decreases

8. An Ontario strawberry wholesaler that is in a perfectly competitive market in the short run is producing the profit-maximizing output and is earning economic profits. At the profit maximizing output, all of the following are correct EXCEPT:
 - A) price is greater than marginal cost.
 - B) price is equal to marginal revenue.
 - C) price is greater than average total cost.
 - D) marginal cost is greater than average total cost.

Use the following to answer questions 8-9.

Table: Variable Costs for Lots

Quantity of lots	Variable costs
0	\$0
10	200
20	300
30	500
40	750
50	1,100

9. (Table: Variable Costs for Lots) During the winter, Alexa runs a snow-clearing service, and snow-clearing service is a perfectly competitive industry. Her only fixed cost is \$1,000 for a tractor. Her variable costs per cleared lot, shown in the accompanying table, include fuel and hot coffee. What is Alexa's shutdown price?
- A) \$0
 - B) \$15
 - C) \$50
 - D) \$42
10. (Table: Variable Costs for Lots) During the winter, Alexa runs a snow-clearing service, and snow-clearing service is a perfectly competitive industry. Her only fixed cost is \$1,000 for a tractor. Her variable costs per cleared lot, shown in the accompanying table, include fuel and hot coffee. If the current price per cleared lot is \$14, how many lots should Alexa clear?
- A) 0
 - B) 40
 - C) 50
 - D) 20
11. Many furniture stores run GOING OUT OF BUSINESS sales but never go out business. In order for the shutdown decision to be one that must obviously be pursued, the price of furniture must be _____ than the _____ average variable cost.
- A) higher; maximum
 - B) lower; minimum
 - C) higher; minimum
 - D) lower; maximum
12. If firms are making positive economic profits in the short run, then, in the long run:
- A) the short-run industry supply curve will shift rightward.
 - B) firms will enter the industry.
 - C) industry output will rise and price will fall
 - D) all of the above will occur.
13. In perfectly competitive long-run equilibrium:
- A) all firms make positive economic profits.
 - B) all firms produce at the minimum point of their average total cost curves.
 - C) the industry supply curve must be upward sloping.
 - D) all firms face the same price, but the value of marginal cost will vary directly with firm size.

14. In the long run, firms will exit an industry if the market price is consistently less than their break-even price.
A) True
B) False
15. Lawn mowing service is a perfectly competitive industry. Alex's lawn mowing service should shut down in the short run whenever his profits are negative.
A) True
B) False
16. The short-run industry supply curve is drawn on the assumption that the number of firms in the industry doesn't increase, but this curve allows for a decrease in the number of firms caused by bankrupt firms leaving the industry.
A) True
B) False
17. In long-run equilibrium in a perfectly competitive market, all firms will be operating at the same level of marginal cost.
A) True
B) False
18. The short-run industry supply curve is more elastic than the long-run industry supply curve.
A) True
B) False
19. The market for beef is in long-run equilibrium at a price of \$3.25/lb. The announcement that mad cow disease has been discovered in Canada reduces the demand for beef sharply, and the price falls to \$2.00/lb. If the long-run supply curve is horizontal, then when long-run equilibrium is re-established the price will be \$2/lb.
A) True
B) False

20. Bob runs a burger restaurant where his fixed costs are \$200 per day, and his variable costs are given by the table:

Quantity of Burgers per day	Variable Costs	Total Costs	AVC	ATC	MC
0	0	200			
100	400	600	4	6	
200	600	800	3	4	
300	960	1160	3.2		
400	1400	1600	3.5		
500	2000	2200	4		

- Calculate Bob's total costs, average variable costs, average total costs, and marginal costs.
- What is Bob's *breakeven price*? _____
- What is Bob's *shut down price*? _____
- Suppose the price of burgers is \$4.00. In the short run, should Bob produce or shut down? If he produces, what will his profit be?

Circle one: Produce or Shut down

Quantity produced = _____

Total revenue = _____

Total costs = _____

Profit = _____

- Suppose the price of burgers is \$3.20. In the short run, should Bob produce or shut down? If he produces, what will his profit be?

Circle one: Produce or Shut down

Quantity produced = _____

Total revenue = _____

Total costs = _____

Profit = _____

- f. Suppose the price of burgers is \$2.90. In the short run, should Bob produce or shut down? If he produces, what will his profit be?

Circle one: Produce or Shut down

Quantity produced = _____

Total revenue = _____

Total costs = _____

Profit = _____

- g. Assuming other burger restaurants have similar costs as Bob, if the price of burgers is \$4.00, what will happen to supply of burgers in the long run?

- h. What will be the price of burgers in the long run? _____

- i. Draw Bob's individual supply curve.



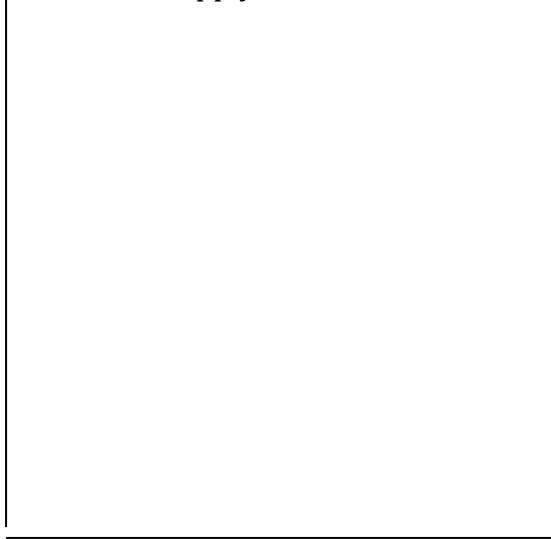
21. In a perfectly competitive market, what is the difference between the effect of a change in supply for an *individual producer* compared to the effect of a change in supply for *all the producers in the market*? Use diagrams to illustrate your answer.

Two blank coordinate systems are provided for drawing diagrams. Each system consists of a vertical line (representing the y-axis) and a horizontal line (representing the x-axis), forming an L-shape. The left system is for illustrating the effect of a change in supply for an individual producer, and the right system is for illustrating the effect of a change in supply for all producers in the market.

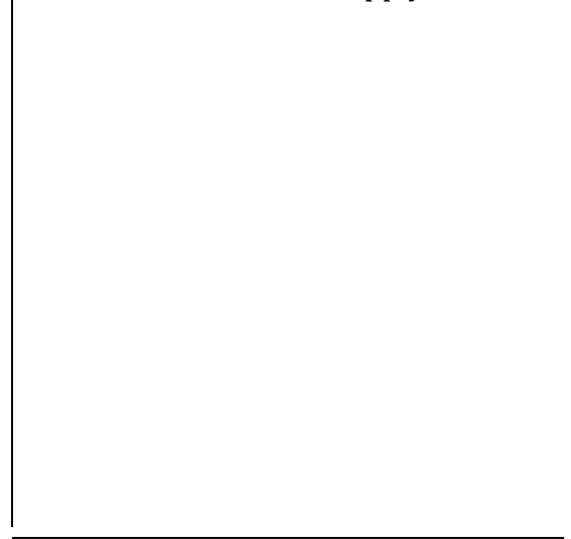
22. What are the three characteristics of a *perfectly competitive market*?

23. Draw a diagram that illustrates a *market supply and demand* and an *individual producer's supply curve* (with the ATC and AVC curves) in equilibrium.

Market Supply and Demand



Individual Producer Supply



- a. Label the individual producer's *shut down price* and *breakeven price*.
- b. Is the individual producer earning any profit? How do you know?
- c. Are any producers earning profits?
- d. Now show an increase in *market demand*.
- e. What happens to the price?
- f. What happens to the output of the *individual producer*?
- g. Is the individual producer earning any profit? How do you know?
- h. What happens to *market supply* in the short run?
- i. What happens to *market supply* in the long run?
- j. On your graphs show the new equilibrium that will be reached in the long run.
- k. Can the individual firms earn profits in the short run?
- l. Can the individual firms earn profits in the long run?