Solutions to Microeconomics Examination

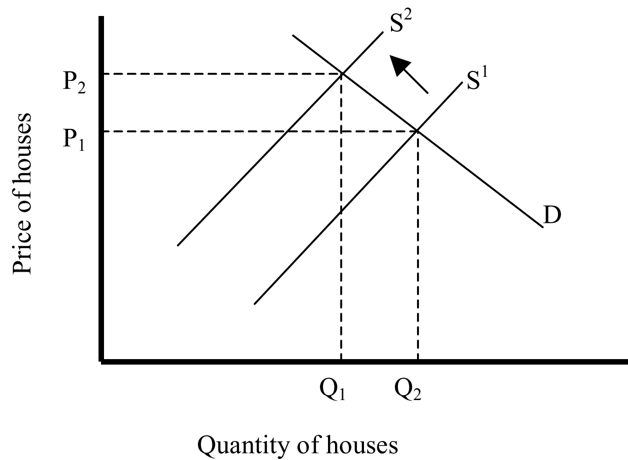
Note: The following solutions correspond to the microeconomics exam that was created for use with Hird, *Working with Economics: A Canadian Framework,* Sixth Edition.

Part A **Multiple Choice**

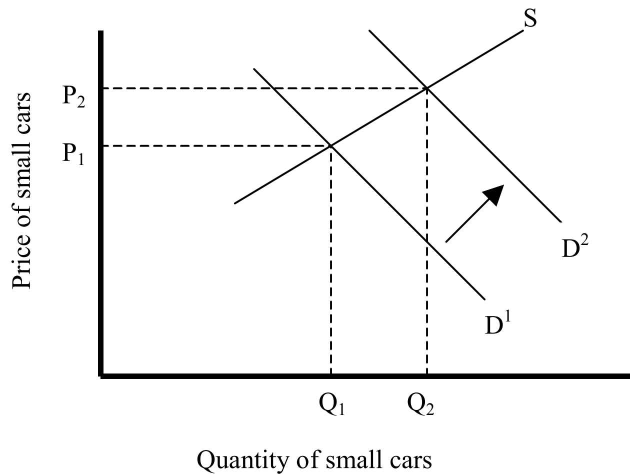
1. b
2. a
3. c
4. a
5. d
6. c
7. b
8. d
9. d
10. c
11. b
12. c
13. a
14. b
15. c
16. d
17. a
18. d
19. d
20. a
21. a
22. c
23. c
24. a
25. b

Part B Short Answers

1a. The supply curve shifts to the left:



1b. The demand curve shifts to the right:



2a. Ryan's expenses total $82,600. The opportunity cost of the lost wages is $30,000 and the opportunity cost of the lost interest is $2,400. The lost interest is 0.06 x $40,000 = $2,400.
Economic profit = Revenue – (Explicit + Implicit Costs)
= $108,000 – ($82,600 + $30,000 + $2,400)
= $108,000 - $115,000
= -$7,000

2b. As long as total revenue exceeds total variable cost, Ryan should stay in business in the short run. The question does not specify which costs may be fixed costs. If we assume that classroom rent and bar equipment rental are fixed costs, then total variable costs are $115,000 - $12,000 - $15,000 = $88,000. Since total revenue ($108,000) exceeds total variable cost ($88,000), Ryan should stay in business in the short run.

3a. A. demand curve B. marginal revenue curve
3b. A. marginal cost curve B. average total cost curve
C. average variable cost curve

4.
a. The law of diminishing returns states that when a variable resource (eg workers) is added to a fixed resource (eg land), a point will be reached where the increases in output from the additions of the variable resource will become smaller and smaller.

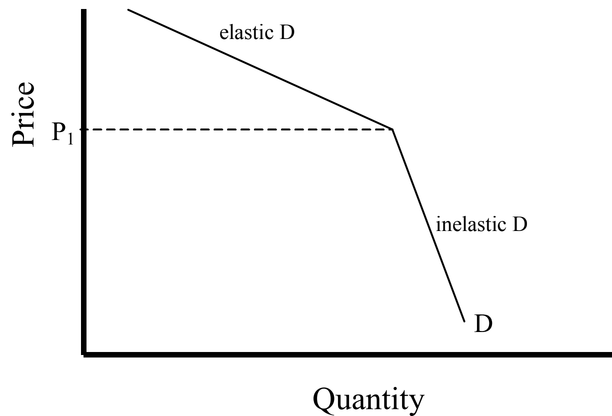
b. A form of competition characterized by thousands of sellers each producing an identical product. No one seller has any control over the price and entry into and exit from the industry are very easy. There is also no non-price competition in the industry.

c. The addition to total revenue from hiring one more worker.

d. The proportion of economic activity dominated by the largest firms in the industry.

e. Price cutting with the intent of driving competitors from the marketplace.

5.



The kinked demand curve provides an explanation for the fact that prices change less frequently in an oligopoly.

In an oligopoly, firms must be aware of the reaction of other firms when contemplating a change in price. Unfortunately, perfect information is not available, and the firm contemplating a price change is uncertain about the reaction of its competitors to a change in price. The firm may believe that its competitors will not follow a price increase, in which case the demand curve above the current price will be elastic. An increase in price will lead to a large reduction in sales, and a subsequent drop in total revenue. The firm may believe that competitors will follow a price decrease, in which case the demand curve below the current price is inelastic. When faced with an inelastic demand curve, a decrease in price will lead to a decrease in total revenue. Since both a price increase, and a price decrease, may lead to a decrease in total revenue, the firm stays with the current price, which is at the kink in the curve separating the elastic and inelastic sections of the curve.

One difficulty with the kinked demand curve theory is explaining how the price settled at the kink in the first place. Another difficulty is the explanation of how the price changes.

6. The socially optimum price sets the price equal to the marginal cost so that the value obtained from the last unit consumed is equal to the extra cost of producing that unit. Unfortunately, the price may be so low that the firm is losing money. Price may be less than average total cost.

The fair return price sets the price equal to the average total cost. One disadvantage is the lack of incentive to lower costs on the part of the firm. Secondly, there is a debate surrounding the definition of a fair return. What rate of return should the firm receive on its investment if it is not forced to compete?

In reality, drawing the demand curve may be difficult, and thus, the setting of a price even more difficult.

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a. If the price of the product increases, consumers can turn to the competitors' products. Thus, even a small increase in price may result in a relatively large decrease in sales.

b. As long as there are no barriers to entry, the presence of economic profits will attract new firms into the industry. The entry of new firms will reduce the profit of the existing firms.

c. Labour market barriers stop the flow of workers from lower-wage jobs to higher-wage jobs. Thus the supply of workers in the higher-paid jobs remains relatively small, and the supply of workers in the lower-paid jobs remains relatively high.

d. Oligopolies come about because of mergers and the economies of scale achieved by the larger firms.

e. With an inelastic demand curve, an increase in the wage rate will not be accompanied by a large decrease in the number of workers hired.