

(15 Points) 4. Suppose a firm is faced with the following production and cost information.

Total Output	Total Fixed Cost	Total Variable Cost	Total Cost	Average Total Cost	Marginal Cost
1,000	\$10,000	\$10,000			
1,500		11,000			
1,800		13,000			
2,100		16,000			
2,300		20,000			
2,400		25,000			

a. Please complete the blanks in the table.

b. If the price of the output is \$21/unit, use the appropriate decision rule to determine the profit-maximizing level of output. Please give an intuitive explanation for why your answer is correct.

(10 pts.) 5. Economies of speed represents a key strategic concept in determining the competitiveness of a particular company.

a. Illustrate with a single diagram learning curves for two firms (A and B) where for a period of time firm B has a cost advantage over firm A but this advantage is lost after a certain level of cumulative production is reached because firm A is “a quick learner.”

b. What is the key difference between a learning curve and an experience curve?

c. Briefly discuss two characteristics of a learning organization. Give a practical business example of each characteristic.

(10 pts.) 6. Suppose a business firm wants to compete in a perfectly competitive market (i.e. the firm cannot influence product price) with a slightly new product. The production technology, and hence the cost relationships, are known by the firm but management is unsure about possible market prices. Management knows that different market prices could produce (a) an “abnormal” profit, (b) a break-even, normal profit, (c) a short-term loss, or (d) a shut down decision. Using the appropriate economic model, please illustrate in one graph the different optimal levels of output for this new product for each price scenario. Then briefly explain why scenario c is not sustainable in the long run and why stopping production is the cost minimizing decision in scenario d.