

ELEMENTARY MICROECONOMICS  
 ECONOMICS 130  
 HOMEWORK ASSIGNMENT  
 CHAPTERS 13 AND 14  
 THIS ASSIGNMENT IS WORTH 40 POINTS

1. Chapter 13 discusses many types of costs: opportunity cost, total cost, fixed cost, variable cost, average total cost and marginal cost. Fill in the type of cost that best completes the phrases below: (1 point apiece for a total of 6 points)
  - a. The true cost of taking some action is its \_\_\_\_\_
  - b. \_\_\_\_\_ is falling when marginal cost is below it, and rising when marginal cost is above it.
  - c. A cost that does not depend on the quantity produced is a \_\_\_\_\_
  - d. In the ice-cream industry in the short run, \_\_\_\_\_ includes the cost of cream and sugar, but not the cost of the factory.
  - e. Profits equal total revenue minus \_\_\_\_\_.
  - f. The cost of producing an extra unit of output is \_\_\_\_\_.
  
2. A commercial fisherman notices the following relationship between hours spent fishing and quantity of fish caught:

Hours	Quantity of Fish (in pounds)	Marginal Product of Each Hour Spent Fishing
0	0	
1	10	
2	18	
3	24	
4	28	
5	30	

- a. What is the marginal product of each hour spent fishing? Put your answer on the third column of the above table. (1 point apiece for a total of 6 points)
- b. Use the above data to graph the fisherman's production function. Explain its shape. (2 points for the graph and 2 points for the explanation)

- c. The fisherman has a fixed cost of \$10 (his pole). The opportunity cost of his time is \$5 per hour. Graph the fisherman's total-cost curve. Explain its shape. (2 points for the graph and 2 points for the explanation)

3. Healthy Harry's Juice Bar has the following cost schedules:

Quantity	Variable Cost	Total Cost	Average Variable Cost	Average Total Cost	Marginal Cost
0	0	30			
1	10	40			
2	25	55			
3	45	75			
4	70	100			
5	100	130			
6	135	165			

- a. Calculate average variable cost, average total cost and marginal cost for each quantity. Put your answer on the above table where indicated. (1/3 of a point for a total of 7 points).

- b. Graph all three curves (Average Variable Cost, Average Total Cost and Marginal Cost). What is the relationship between the marginal and the average total cost curve? What is the relationship between the average total cost curve and the average variable cost curve? ( 1 point each for a total of 3 points).
4. High prices traditionally cause expansion in an industry, eventually bringing an end to high prices and manufacturer's prosperity. Using graphs from Chapter 14, explain how this phenomenon works. (6 points)

5. Watch a TV show and explain an economic principle in action. Name the TV show and explain how the concept is working in the context of the TV show. (4 points)