1. Use the following information to determine the total

fixed costs, total variable costs, average fixed costs,

average variable costs, average total costs, and marginal

costs.

**Total Output Costs *TFC TVC AFC AVC ATC MC***

 **0 $100**

 **1 $150**

 **2 $225**

 **3 $230**

 **4 $300**

 **5 $400**

**Total Output Cost *TFC TVC AFC AVC ATC MC***

 **0 $ 20**

 **10 $ 40**

 **20 $ 60**

 **30 $ 90**

 **40 $120**

 **50 $180**

 **60 $280**

2. Use the following table to answer the questions listed

below.

a. Calculate the total fixed costs, total variable costs,

average fixed costs, average variable costs, average

total costs, and marginal costs.

b. Plot each of the cost curves.

c. At what quantity of output does marginal cost equal

average total cost and average variable cost?

3. Using the table in exercise 1, explain what happens to

*ATC* when *MC* \_ *ATC, MC* \_ *ATC,* and *MC* \_ *ATC.*

4. Using the table in exercise 2, find the quantity where

*MC* \_ *ATC.* Find the quantity where *ATC* is at its minimum.

Find the quantity that is the most efficient operating

point for the firm

8. Explain why the *ATC* and *MC* curves are U-shaped.

9. Explain why the short-run marginal-cost curve must

intersect the short-run average-total-cost curve at the

minimum point of the *ATC.* Does the marginal-cost

curve intersect the average-variable-cost curve at its

minimum point? What about the average-fixed-cost

curve? Why doesn’t the marginal-cost curve also intersect

the average-fixed-cost curve at its minimum

point?