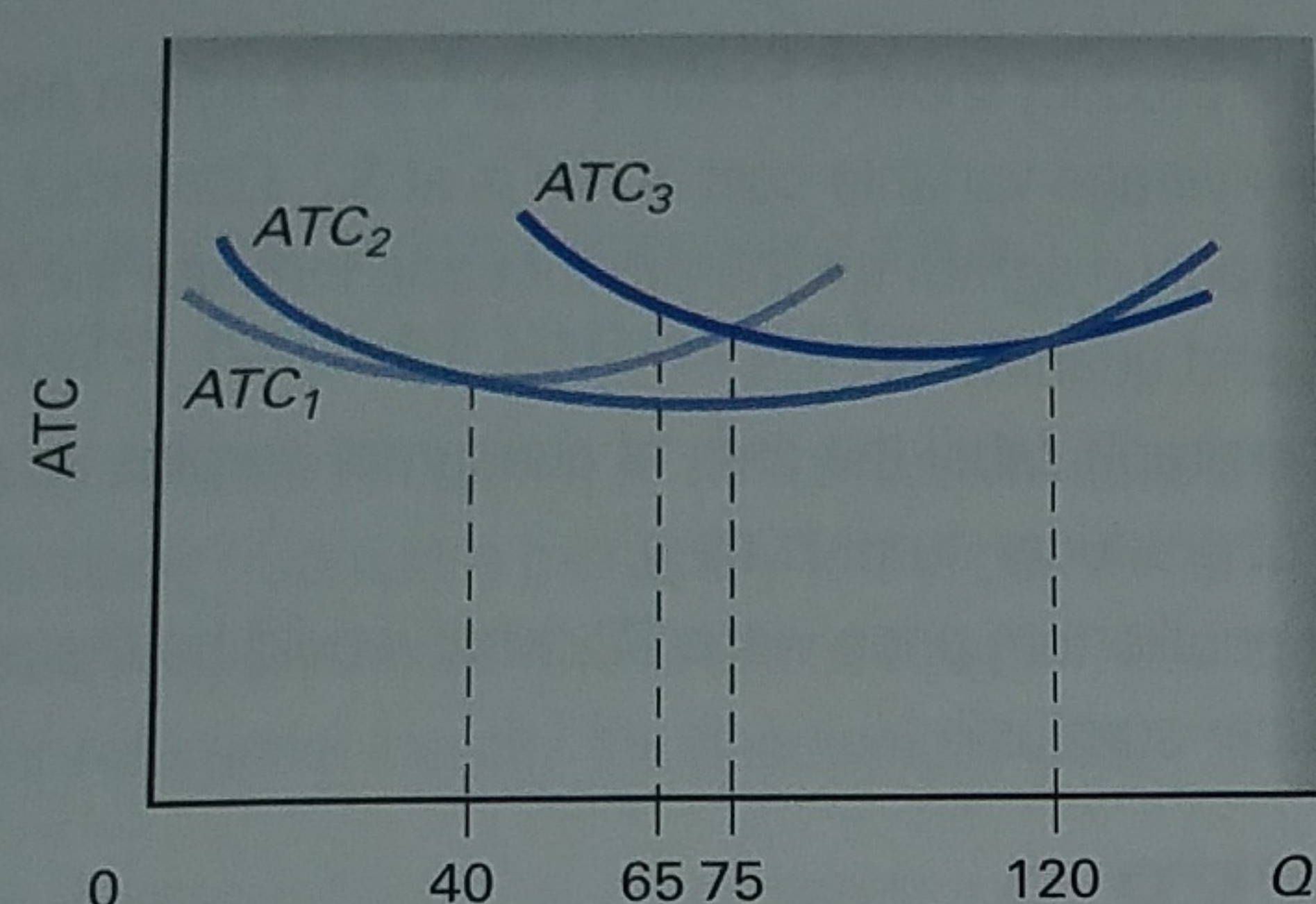


Quantity of Labor	Total Output	AVC	ATC	MC
0	0	_____	_____	_____
1	100	_____	_____	_____
2	250	_____	_____	_____
3	350	_____	_____	_____
4	400	_____	_____	_____
5	425	_____	_____	_____

7-4 Explain the sources of economies of scale and diseconomies of scale

- (Long-Run Costs) Suppose the firm has only three possible scales of production as shown below:
 - Which scale of production is most efficient when $Q = 65$?
 - Which scale of production is most efficient when $Q = 75$?
 - Trace out the long-run average cost curve on the diagram.



- (Scale Economies) Identify sources of economies of scale and diseconomies of scale.

CHAPTER 8

8-1 Describe the market structure of perfect competition

- (Market Structure) Define market structure. What factors are considered in determining the market structure of a particular industry?
- (Perfect Competition Characteristics) Describe the characteristics of perfect competition.
- (Demand Under Perfect Competition) What type of demand curve does a perfectly competitive firm face? Why?

8-2 Determine the perfectly competitive firm's profit-maximizing output in the short run

- (Short-Run Profit Maximization) A perfectly competitive firm has the following fixed and variable costs in the short run. The market price for the firm's product is \$150.

Output	FC	VC	TC	TR	Profit/Loss
0	\$100	\$ 0	_____	_____	_____
1	\$100	\$100	_____	_____	_____
2	\$100	\$180	_____	_____	_____
3	\$100	\$300	_____	_____	_____
4	\$100	\$440	_____	_____	_____
5	\$100	\$600	_____	_____	_____
6	\$100	\$780	_____	_____	_____

- Complete the table.
- At what output rate does the firm maximize profit or minimize loss?
- What is the firm's marginal revenue at each positive level of output? Its average revenue?
- What can you say about the relationship between marginal revenue and marginal cost for output rates below the profit-maximizing (or loss-minimizing) rate? For output rates above the profit-maximizing (or loss-minimizing) rate?

8-3 Outline the conditions under which a firm should produce in the short run rather than shut down, even though it incurs an economic loss

- (Minimizing Loss in the Short Run) Explain the different options a firm has for minimizing losses in the short run.
- (Short-Run Loss) Suppose a firm decides to shut down in the short run. What is the resulting loss?

8-4 Describe a perfectly competitive firm's short-run supply curve

- (The Short-Run Firm Supply Curve) Use the following data to answer the questions below:

Q	VC	MC	AVC
1	\$10	_____	_____
2	\$16	_____	_____
3	\$20	_____	_____
4	\$25	_____	_____
5	\$31	_____	_____
6	\$38	_____	_____
7	\$46	_____	_____
8	\$55	_____	_____
9	\$65	_____	_____

- Calculate the marginal cost and average variable cost for each level of production.
 - How much would the firm produce if it could sell its product for \$5? For \$7? For \$10?
 - Explain your answers.
 - Assuming that its fixed cost is \$3, calculate the firm's profit at each of the production levels determined in part (b).
- (The Short-Run Firm Supply Curve) Each of the following situations could exist for a perfectly competitive firm in the short run. In each case, indicate whether the firm should produce in the short run or shut down in the short run, or whether additional information is needed to determine what it should do in the short run.
 - Total cost exceeds total revenue at all output levels.
 - Variable cost exceeds total revenue at all output levels.
 - Total revenue exceeds fixed cost at all output levels.
 - Marginal revenue exceeds marginal cost at the current output level.
 - Price exceeds average total cost at all output levels.
 - Average variable cost exceeds price at all output levels.
 - Average total cost exceeds price at all output levels.