

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (30 points) Recreate the following table on your answer sheet. Fill it in. Put the equation you used to calculate the values with each value. If there is no calculation, then BRIEFLY explain why there is no calculation. Assume there are no fixed costs.

Q	TC	ATC	MC
0			
2	40		
4		15	
6			15
	160	20	
	270		110

2) (5 points) If the firm's cost function is given by $TC = 100 - 2Q + 3Q^2$, then calculate ATC and MC. Briefly explain what you did and show all work.

3) (5 points) What is wrong with Figure 2-3 on Page 47? Explain your logic

4) (15 points) Is it true that the marginal of some variable goes through the maximum of the average of that variable? For example, does marginal profit go through the maximum of the average profit? Explain your logic.

5) (20 points) What is *Benchmarking*? Why must the CEO visibly support it?

6) (25 points) What is TQM? Why must its goals be both few in number and clear?