Wilf Csaplar Jr.   Economics 280   Homework #2   Due 09/09

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) (10 points) Suppose the total profit (TΠ) function is given by TΠ = -10 + 12Q - 2Q$^{1/2}$. Calculate the average profit (AΠ) and marginal profit (MΠ). Show all work and briefly explain what you did.

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

3) (10 points) Since total profit (TΠ) = total revenue (TR) - total costs (TC), prove that profit maximization is MR = MC. (Hint: maximization requires setting the first derivative equal to zero.) Explain what you did in each step.

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 goes through the maximum of the average profit? Explain your logic.

5) (20 points) What is "TQM" and why must the CEO be strongly and visibly behind it?

6) (20 points) What is "reengineering"? Like TQM, it must have a few clear strategic goals. Why is this true?

7) (20 points) What is a "learning organization"? Why must it have a shared vision?