



## In Class Exercises (ICE) - 11/17/00

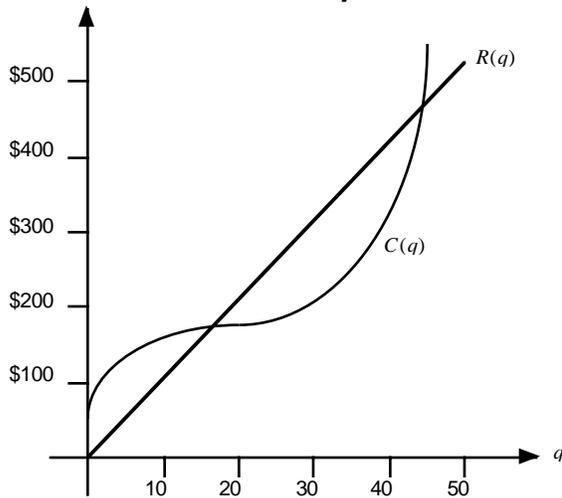
**A common article of faith among some business people is that,**

*Maximum profit occurs when marginal revenue equals marginal cost.*

**If  $q$  items are produced, the cost and revenue can be denoted by  $C(q)$  and  $R(q)$ .**

- **Use calculus to explain why the article of faith is reasonable. Be careful to explain why business people should use caution when using this article of faith.**

- **Using the graphs given below, estimate how many items should be produced to maximize profits.**



- **From the graphs above, what is the fixed cost? What is the fixed revenue?**

- **In terms of the ways in which companies and the American economy works, explain why your answers for fixed cost and revenue make sense.**