

Due: May 31, 2012

Econ 2020A
Assignment
Total marks: 10
Answer the following questions

1. (4 marks) State whether each of the following statements is true or false. Using appropriate **diagrams**, **explain** your response.
 - a. If a firm sets marginal revenue equal to marginal cost it would necessarily make an economic profit
 - b. A profit maximizing monopolist must operate on the elastic portion of the demand curve.

2. (2*3=6 marks)
 - a. What is the law of supply? Using diagrams **explain** how you would derive the supply curve of a competitive firm.
 - b. A firm's short run total cost curve is: $C = 0.1q^2 + 10q + 40$. Suppose the firm can sell any amount at the market price, $P = \$20$. Calculate profit maximizing level of output, and the amount of profit for the firm.
 - c. Find the supply equation of the above firm. If there are 100 identical firms, find the equation of the market supply curve.