

Name \_\_\_\_\_

## Math Skills for Intermediate Microeconomics

1) Given a demand function:  $Q_{dx} = 198,000 - 20,000 P_x$  and

a supply function:  $Q_{sx} = -2000 + 20,000P_x$

- a. Find the equilibrium price that will be charged for the good. (Show work in an organized fashion)

Answer \_\_\_\_\_

- b. Find the equilibrium quantity of the good produced (Show work in an organized fashion)

Answer \_\_\_\_\_

2) Given the demand function:  $Q_{dx} = 198,000 - 20,000 P_x$ , Show the Total Revenue Function Where  $TR = f(Q)$ .

Answer \_\_\_\_\_

3) Given the Demand function:  $P_x = 80 - .2Q_x$ , find the output level that will maximize total revenue.

Answer \_\_\_\_\_

4) Given the demand function:  $P_x = 80 - .2Q_x$ , find the price that would be charged to maximize total revenue.

Answer \_\_\_\_\_