Math 1031, Self-Evaluation Exercise 2
October 30, 2009

Name: _____

Discussion Section: _____

Discussion TA: _____

This exercise is for your practise. There are four open-ended problems. Give yourself 20 minutes to complete the exercise, and see how you do.

1. Consider $f(x) = 3^{1-x}$

   a.) What basic exponential curve can you use to help you graph this function?

   $$y = \_\_\_\_\_$$

   b.) Graph the basic curve in (a).

   c.) Graph $f(x)$.

2. Evaluate the expression:

$$\log_3\left(\frac{\sqrt[4]{27}}{3}\right)$$

3. Solve the equation:

$$\ln(x+20) - \ln(x+2) = \ln x$$

4. How long will it take \$1000 to be worth \$3500 if invested at 10.5% interest compounded quarterly?