Newberger, College Algebra 112-10, Spring 2005
Homework: Log Functions.
Due Tuesday, May 3

On Monday night, print out the computer lab for Tuesday, May 3.
Make your homework, neat, organized and easy to read. (Please!)

I. Read Section 5.2.

II. Make sure you can do problems #1-30 page 406. You are responsible for drilling yourself on these types of problems. Make sure you understand what is being asked in each block of problems; this is how such problems will be worded on the exam. Check your answers and get help when you do not understand. Do not turn in your work for these problems.

III. If you have not already done so, buy or borrow a calculator with a log and an ln button on it. Make sure you can do problems #31-34 page 406. Turn in your answers to problem #32 only.

IV. Do problems #35-38 on page 406. Sketch the graphs in your homework.

V. i. Sketch the graph of $\ln(x)$ in your homework, labelling the point $(1, 0)$ on the graph. What are the domain and range of $\ln(x)$? Note that the graph has a vertical asymptote at $x = 0$.

ii. Do problems #39-44 on page 406-407. For each part, write a sentence explaining what you would have to do to the graph of $\ln(x)$ to get the graph of the given formula. For example, for number #44, I would write, "To get the graph of $-\ln(-x)$, I would reflect the graph of $\ln(x)$ across the y-axis and then across the x-axis."

VI. Read the guidelines for solving exponential equations on page 416, as well as Examples 1 and 2.

VII. Make sure you can do problems #1-26 on page 424. From that block, do problems #6, 8, 10, and 24 to turn in. Show the steps in your calculation clearly, so that I can see what you did. Ask for help if you need it; the techniques you use here will be instrumental in the word problems in the next section.

VIII. Next week's homework will be from the word problems in section 5.5. To help prepare yourself for them, read the subsection entitled Exponential Models of population growth, beginning on page 427.