

Newberger, MATH 112-16, Spring 05

Homework: Review Sheet for Exam 3

This exam covers Chapter 5.

Topics:

Sections 5.1 and 5.2 Know the graphs of exponential functions and log functions as shown on page 386 and 402. Be able to find the formula for an exponential function or a log function given the graph and the coordinates of a point on the graph. See page 392, #9-18 and page 406, #35-44. Understand the definition of the log function, and be able to use it to find the log when the argument is an even power of the base.

Section 5.3 Know the laws of logs. You may be asked to write out the three laws of logs. Be able to use the laws to simplify and expand logarithmic expressions.

Section 5.4 Be able to solve equations with exponential functions. In particular be able to recognize and solve exponential equations of quadratic type. Be able to solve equations with logs. In particular, be able to use the laws of logs to manipulate equations into a form in which it can be solved.

Section 5.5 Know the formula for the exponential model of population growth and for Newton's Law of Cooling. Be able to state these formulas along with the meaning of each of the variables. Be able to do word problems involving exponential and logarithmic models in which you are given the model and asked to use it to gain information about the given situation.