

Newberger College Algebra for the Sciences Fall 04

**Homework: Exponential Functions and their graphs**

Due: Tuesday, April 19

- (1) Read Section 5.1.
- (2) On page 392, do problems #9-12. Sketch the graphs in your homework.
- (3) Write a short paragraph explaining what the graph of  $a^x$  looks like. Make sure you describe the graph when  $0 < a < 1$  and when  $1 < a < \infty$  separately, since they look different.
- (4) Use the techniques from Section 3.4 to do problems #20, 24, 26 and 28 on page 393.
- (5) Do page 394 #60. Before you answer the parts, write a sentence explaining what the formula models, making sure to include a verbal description of both the input and the output of the function. Then do the problem.