MAT 102 SPRING 2008
HINTS ON HOMEWORK 3

§4.6.

- **Q50.** Take the logarithm of the function. Use $\ln(a^b) = b \ln a$. You may want to take a look at Example 8 in the same section.
- **Q69.** Imitate Example 8. Think of r as 2 if you wish; but of course make sure you write r and not 2 when you submit your work.

§4.8.

- **Q40.** Expand the product: $x^{-3}(x+1) = x^{-2} + x^{-3}$.

Practice exercises for Chapter 4.

- **Q6.** Where is f increasing? Use the first derivative test.
- **Q94.** It amounts to finding the minimum length of a rod that passes through $(8, 6)$ and lies in the shaded corridor. Also note that it is easier to minimize the square of the length instead.