**Review Sheet for Chapter Five: Exponential and Logarithmic Functions**

You should be able to do the following things on the test:

Without a calculator

Use properties of exponents to simplify expressions *Section R-2*

Identify the domain, range, y-intercept and asymptote of an exponential function *Section 5.1*

Apply and interpret transformations of exponential functions and graphs *Section 5.1*

Write and interpret exponential functions that model:

* annual growth or decay *Section 5.2*
* compounding *k* times per year *Section 5.1*
* continuous growth or decay *Sections 5.1 & 5.2*

Identify the domain, range, y-intercept and asymptote of a logarithmic function *Section 5.3*

Apply and interpret transformations of logarithmic functions and graphs *Section 5.3*

Evaluate logarithms *Section 5.3*

Convert between logarithmic and exponential form *Section 5.3*

Apply properties of logarithms using any base, including base 10 and base e *Section 5.3*

Use the change of base formula to rewrite any logarithm *Section 5.3*

Use inverse operations to solve exponential and logarithmic equations *Section 5.5*

Use the properties of logarithms to solve exponential and logarithmic equations *Section 5.5*

With a calculator

All of the above, plus…

Graph and solve word problems that model:

* annual growth or decay *Section 5.2*
* compounding *k* times per year *Section 5.1*
* continuous growth or decay *Sections 5.1 & 5.2*

Use the change of base formula to estimate any logarithm *Section 5.3*

Use graphing to solve exponential and logarithmic equations *Section 5.5*

These problems would be good to review before the text

Page 41:30-42 all

Pages 380-382: 1-51 all, 55, 57, 70, 74, 79, 80