Coreq Support for Section 5.4

# Topic 1: Understanding the Definition of a Logarithmic Function

***Definition*:** For , the **logarithmic function with base *b*** is defined by  if and only if ****.

The definition of a logarithmic function can be used to rewrite a logarithmic equation as an equation involving an exponent or to rewrite an equation involving an exponent as a logarithmic equation.

# Topic 2: Solving Exponential Equations by Relating the Bases

Recall from section 5.1 that some exponential equations can be solved by using the **Method of Relating the Bases**. If $b$ is a positive number other than $1$ and , then .

# Topic 3: Evaluating Expressions with Negative and Rational Exponents

# Topic 4: Solving Quadratic Equations by Factoring

# Topic 5: Solving Rational Equations