Coreq Support for Section 5.4

# Topic 1: 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 is a positive number other than and , then .

# Topic 2: 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 3: Solving Quadratic Equations by Factoring

# Topic 4: Evaluating Expressions with Negative and Rational Exponents