Study Guide

Use the following study guide to direct students who have difficulty with specific questions to appropriate examples to review.

Question	Section(s)	Refer to
1	7.1	Example 1 (page 365)
2	7.1	Example 2 (pages 366–367)
3	7.3	Investigate (pages 378–379)
4	7.3	Example 1 (pages 380–381)
5	7.3	Example 2 (page 381)
6a), 6b)	7.1	Example 2 (pages 366–367)
6c), 6d)	7.4	Example 1 (page 388)
7	7.2, 7.4	Example 2 Method 2 (page 372), Investigate (page 387)
8	7.4	Investigate (page 387), Example 2 (pages 389–390)
9	7.2	Example 1 (pages 370–371)
10	7.2	Example 1 (pages 370–371)
11	7.4	Example 2 (pages 389–390)
12	7.5	Example 1 (pages 394–399)
13	7.5	Example 1 (pages 394–399)

Can students do each of the following?
• Write a power using different bases
• Solve equations involving exponential expressions using a variety of methods (change of base, algebraic manipulation, use of graphing technology)
• Identify and reject extraneous roots to equations involving exponential expressions
• Solve problems involving exponential equations
• Apply the product and quotient laws of logarithms
• State restrictions on variables for expressions involving logarithms
• Solve equations involving logarithmic expressions using a variety of methods (rewrite numbers as logarithms, apply laws of logarithms, use of graphing technology)
• Solve problems involving logarithmic equations
• Construct and evaluate mathematical models involving exponential and logarithmic relationships
• Apply exponential and logarithmic models to solve contextual problems