Chapter 6 Practice Test

Student Text Pages
392–393

Suggested Timing
60–80 min

Tools
- graphing calculators

Optional
- computers with *The Geometer's Sketchpad®*

Related Resources
BLM 6-18 Chapter 6 Practice Test
BLM 6-19 Chapter 6 Test

Accommodations

ESL—have students work with a partner to assist with reading the questions. Have students review words in the chapter that they initially did not understand. Allow students to refer to their personal math dictionaries, if necessary.

Study Guide

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

Question	Section(s)	Refer to
1	6.1	Example 1 (pages 344–345)
2	6.2	Example 3 (page 356)
3	6.3	Example 1 (page 364)
4	6.1	Example 3 (page 346)
5	6.3	Example 1 (page 364)
6	6.1	Examples 1 to 3 (pages 344–346)
7	6.3	Example 2 (page 364)
8	6.2	Examples 3 and 4 (pages 356–357)
9	6.2	Example 4 (page 357)
10	6.2	Example 5 (page 357)
11	6.4	Example 2 (pages 369–370)
12	6.4	Example 1 (pages 368–369)
13	6.4 6.5	Example 3 (pages 370–371) Example 1 (pages 380–381)
14	6.5	Investigate (pages 378–379) Example 2 (pages 381–383)
15	6.5	Example 2 (pages 381–383)

Teaching Suggestions

The Practice Test can be assigned as an in-class or a take-home assignment. If it is used as an assessment, use the following guidelines to help you evaluate your students.

Can students do each of the following?
- apply the exponent laws to numerical expressions containing powers involving positive, negative, and zero exponents
- simplify and evaluate algebraic expressions by applying the exponent laws
- calculate approximate values of exponential expressions
- evaluate square, cube, and other roots, mentally and with a calculator
- interpret the meaning of a power having a rational exponent
- write radicals in exponential form and vice versa
- evaluate a power with a rational exponent
- represent a given power as a power having a different base
- solve exponential equations involving powers by finding a common base or by using graphing technology
- solve problems involving expressions with powers
- solve for a variable raised to an exponent
- solve for a variable exponent
- solve problems involving exponential expressions and equations
- compare exponential models with linear and quadratic models and identify some of their features
- choose and apply an appropriate model for a given contextual set of data

Summative Assessment

- After students complete **BLM 6-18 Chapter 6 Practice Test**, you may wish to use **BLM 6-19 Chapter 6 Test** as a summative assessment.