

11

Radicals and Geometry Connections



2A.9.A

11.1 Graph Square Root Functions

A.4.A

11.2 Simplify Radical Expressions

2A.9.D

11.3 Solve Radical Equations

8.9.A

11.4 Apply the Pythagorean Theorem and Its Converse

2A.9.D

11.5 Apply the Distance and Midpoint Formulas

Before

In previous chapters, you learned the following skills, which you'll use in Chapter 11: comparing the graphs of functions with the graphs of parent functions, evaluating square roots, using the distributive property, factoring trinomials, and evaluating expressions.

Prerequisite Skills

VOCABULARY CHECK

Copy and complete the statement.

1. The number or expression inside a radical symbol is called the ?.
2. If $b^2 = a$, then b is a(n) ? of a .

SKILLS CHECK

3. Graph $y = 3 \cdot 2^x$. Compare the graph with the graph of $y = 2^x$.
(Review p. 520 for 11.1.)

Evaluate the expression. (Review p. 110 for 11.2.)

4. $\sqrt{81}$
5. $-\sqrt{64}$
6. $\pm\sqrt{100}$
7. $-\sqrt{121}$

Use the distributive property to write an equivalent expression.

(Review p. 96 for 11.2.)

8. $4(y - 3)$
9. $2(x - 2)$
10. $-x(x + 11)$
11. $4x(x - 9)$

Factor the trinomial. (Review p. 583 for 11.3.)

12. $x^2 + 4x + 4$
13. $m^2 + 9m + 8$
14. $r^2 + 8r + 7$
15. $b^2 + 10b + 16$

16. Evaluate a^2 when $a = 7$. (Review p. 2 for 11.4–11.5.)



TEXAS

@HomeTutor Prerequisite skills practice at classzone.com