9 Polynomials and Factoring

TEXAS

A.1.C	**9.1** Add and Subtract Polynomials
A.4.B	**9.2** Multiply Polynomials
A.4.A	**9.3** Find Special Products of Polynomials
A.4.A	**9.4** Solve Polynomial Equations in Factored Form
A.4.A	**9.5** Factor $x^2 + bx + c$
A.4.A	**9.6** Factor $ax^2 + bx + c$
A.4.A	**9.7** Factor Special Products
A.1.C	**9.8** Factor Polynomials Completely
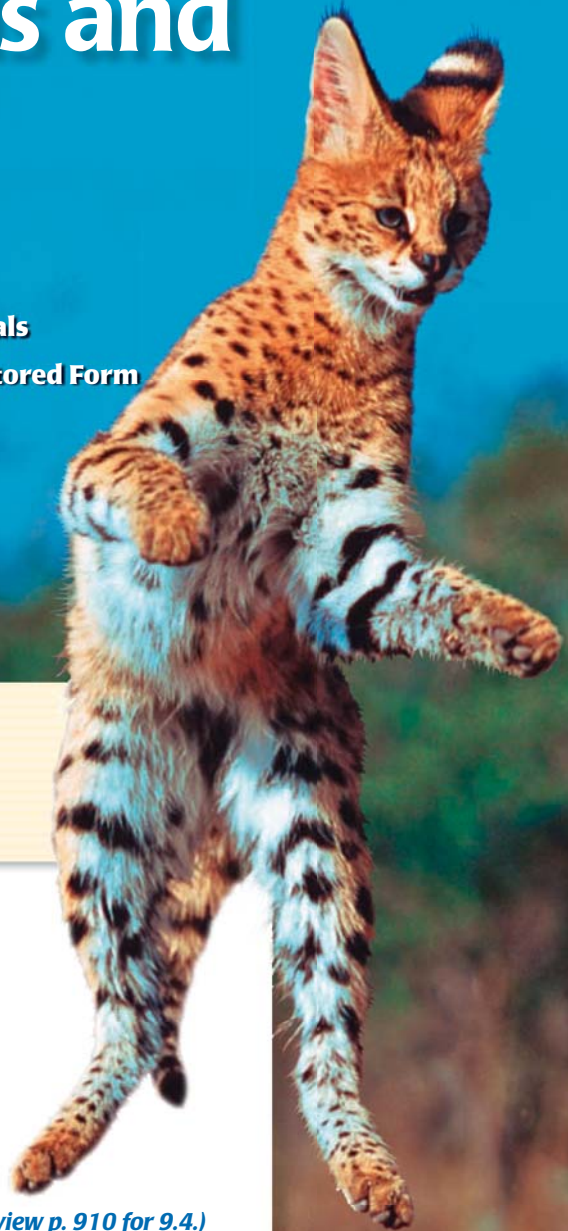
Before

In previous chapters, you learned the following skills, which you'll use in Chapter 9: using the distributive property, combining like terms, and using the properties of exponents.

Prerequisite Skills

VOCABULARY CHECK

Copy and complete the statement.

1. Terms that have the same variable part are called __?__.
2. For a function $f(x)$, a(n) __?__ is an x-value for which $f(x) = 0$.

SKILLS CHECK

Find the greatest common factor of the pair of numbers. *(Review p. 910 for 9.4.)*

3. 121, 77   4. 96, 32   5. 81, 42   6. 12, 56

Simplify the expression. *(Review p. 96 for 9.1–9.8.)*

7. $3x + (-6x)$ 8. $5 + 4x + 2$ 9. $4(2x - 1) + x$ 10. $-(x + 4) - 6x$

Simplify the expression. *(Review p. 489 for 9.2–9.8.)*

11. $(3xy)^3$ 12. $xy^2 \cdot xy^3$ 13. $(x^5)^3$ 14. $(-x)^3$

TEXAS **@HomeTutor** Prerequisite skills practice at classzone.com