

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**Module 2** Writing and Simplifying Algebraic Expressions  
**Lesson 4** Combining Like Terms



**guided  
notes**

### Lesson Objectives

- Recognize like terms.
- Use like terms to simplify expressions.
- Add and subtract polynomials both vertically and horizontally.

A \_\_\_\_\_ is a number, a variable, or a product of numbers and variables.

A \_\_\_\_\_ is the numerical factor of a term.

\_\_\_\_\_ are terms whose variable factors are exactly the same.

To combine like terms, combine the \_\_\_\_\_.

**1** Simplify:  $3a + 5a + 6b - 3b$  \_\_\_\_\_

In the expression,  $2ab^2 + 3a^2b + 4a^2b$ , the terms that have exactly the same variable factors are \_\_\_\_\_.

The expression  $2ab^2 + 3a^2b + 4a^2b$  simplifies to \_\_\_\_\_.

**2** Identify like terms:  $3x, 2xy, -3x, -y, 4xy, 2y$

\_\_\_\_\_

Like terms are terms that contain the same variables with corresponding variables having the same \_\_\_\_\_.

**3** Identify like terms:  $2x^2y^3, 4x^3y^2, 3x^3y^2$

\_\_\_\_\_

A \_\_\_\_\_ is a monomial, or the sum of monomials.

A \_\_\_\_\_ is an expression that consists of just one term.

Polynomials can be added and subtracted vertically.

When problems are arranged vertically, similar terms are in the

\_\_\_\_\_.

When subtracting polynomials, \_\_\_\_\_ the opposite of each

term of the \_\_\_\_\_ polynomial to the first polynomial.

**4** Subtract:  $(x^2 - 5x + 6) - (x^2 - 5x - 6)$  \_\_\_\_\_

