NAME _____ DATE _____ PERIOD _____

4-2 Study Guide and Intervention

Simplifying Algebraic Expressions

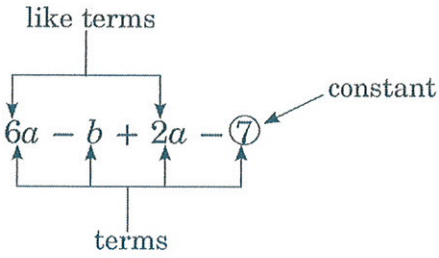
Parts of Algebraic Expressions

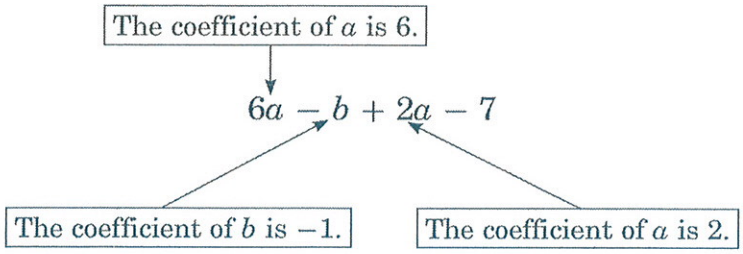
term: a number, variable, or a product of numbers and variables; terms in an expression are seperated by addition or subtraction signs

coefficient: the numerical part of a term that also contains a variable

constant: term without a variable

like terms: terms that contain the same variables





Example **Identify the terms, like terms, coefficients, and constants in the expression $4m - 5m + n - 7$.**

$4m - 5m + n - 7 = 4m + (-5m) + n + (-7)$ Definition of Subtraction

$= 4m + (-5m) + 1n + (-7)$ Identity Property

The terms are $4m$, $-5m$, and $1n$. The like terms are $4m$ and $-5m$. The coefficients are 4, -5, and 1. The constant is -7.

Lesson 4-2

EX 1

Identify the terms, like terms, coefficients, and constants in each expression.

A. $2 + 6a + 4a$ B. $m + 4m + 2m + 5$ C. $3c + 4d - c + 2$

EX 2 Simplify each expression.

A. $5h - 3g + 2g - h$ B. $-3(x - 4) - 2x + 6$ C. $-2x + 4(x + y) - 2y$