## Vocabulary: Simplifying Algebraic Expressions 2

## Vocabulary

- Additive Identity - The sum of any number and zero is that number.
- Algebraic expression - an expression that contains numbers, variables, and operators.
- Commutative - when values connected by an operator give the same result, regardless of the order of the values.
- Multiplication is commutative because $\mathrm{a} \cdot \mathrm{b}$ and $\mathrm{b} \cdot \mathrm{a}$ are equivalent expressions.
- Distributive - when an operator performed on two separate values gives the same result as the operator performed on the values combined.
- Multiplication is distributive because $a(b+c)$ and $a b+a c$ are equivalent expressions.
- Multiplicative Identity - The product of any number and one is that number.
- Multiplication Property of Negative One - The product of any number and negative one is the opposite of that number.
- Multiplication Property of Zero - The product of any number and zero is zero.
- Simplest Form - The form of an expression that contains no parentheses and no terms that can be combined.
- Term - A quantity in an expression. Terms are separated by addition or subtraction.
- Terms can be numbers, the product of a number and a variable, or the product of two or more variables.
- In the expression $3 a^{2}+4 a b+5 b+{ }^{-6}$, the terms are $3 a^{2}, 4 a b, 5 b$, and ${ }^{-6}$.

