



Vocabulary: Simplifying Algebraic Expressions 1



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 $a \cdot b$ and $b \cdot a$ 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 $ab + ac$ 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 $3a^2 + 4ab + 5b + -6$, the terms are $3a^2$, $4ab$, $5b$, and -6 .

