## Vocabulary: Equivalent Algebraic Expressions 1

## Vocabulary

- Algebraic expression - an expression that contains numbers, variables, and operators.
- Associative - when values connected by two identical operators give the same result, regardless of how they are grouped.
- Addition is associative because $(a+b)+c$ and $a+(b+c)$ are equivalent expressions.
- 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.
- Equivalent expressions - expressions that are always equal, regardless of the values assigned to any variables.
- Opposite - a number times -1. Also called the "additive inverse."
- The opposite of 7 is -7 .
- The opposite of -2.5 is 2.5 .
- Reciprocal - 1 divided by a number. Also called the "multiplicative inverse."
- The reciprocal of 5 is $\frac{1}{5}$.
- The reciprocal of $\frac{2}{3}$ is $\frac{3}{2}$.

