



# Family Letter for Unit 1

Dear Family,

During the next few weeks, our math class will be learning about whole numbers, decimals, and algebra.

You can expect to see work that provides practice in evaluating expressions and solving equations. Below is a summary of the mathematical properties that your child will use to complete homework in this unit.

## Vocabulary

**algebraic expression** A combination of one or more variables, numbers, and operations.

**numerical expression** A combination of one or more numbers or operations.

**equation** A mathematical sentence in which the values on both sides of the equal sign (=) are the same.

### Mathematical Properties

Name of Property	Explanation	Numerical and Algebraic Examples
<i>Commutative Property of Addition</i>	The order in which numbers are added does not affect their sum.	$6 + 8 = 8 + 6$ $a + b = a + b$
<i>Associative Property of Addition</i>	The way in which numbers are grouped does not affect their sum.	$(5 + 7) + 3 = 5 + (7 + 3)$ $(a + b) + c = a + (b + c)$
<i>Identity Property of Addition</i>	The sum of any number and zero is that number.	$13 + 0 = 13$ $a + 0 = a$
<i>Commutative Property of Multiplication</i>	Changing order of factors does not change their product.	$8 \times 5 = 5 \times 8$ $a \times b = b \times a$
<i>Associative Property of Multiplication</i>	Changing the grouping of factors does not change their product.	$10 \times (3 \times 4) = (10 \times 3) \times 4$ $a \times (b \times c) = (a \times b) \times c$
<i>Identity Property of Multiplication</i>	The product of a number and 1 is that number.	$62 \times 1 = 62$ $a \times 1 = a$
<i>Zero Property of Multiplication</i>	The product of a number and 0 is 0.	$19 \times 0 = 0$ $a \times 0 = 0$
<i>Distributive Property</i>	The product of a number and the sum of two addends is equal to the sum of the products of that number and each of the addends.	$5 \times (4 + 2) =$ $(5 \times 4) + (5 \times 2)$ $a \times (b + c) =$ $(a \times b) + (a \times c)$

Have your child explain which property is being used to evaluate an expression or to solve an equation.

Sincerely,



### Technology

Check out *Education Place* at [eduplace.com/kids/mw/](http://eduplace.com/kids/mw/) for *e•Glossary*, *e•Word Games*, test prep practice, and more.