## **Simplifying Expressions**



#### **Lesson Objectives**

Use the Commutative, Associative, and Distributive Properties to simplify expressions; Combine like terms

#### **Vocabulary**

term (p. 47)			
like terms (p.	47)		
coefficient (p.	48)		

# LESSON 1-7

### **Simplifying Expressions**



#### **Lesson Objectives**

Use the Commutative, Associative, and Distributive Properties to simplify expressions; Combine like terms

#### **Vocabulary**

term (p. 47)	he parts of an expression to be added or subtracted.
like terms (p. 4	17) Terms that contain the same variables raised to the same
powers.	
coefficient (p.	48) A number multiplied by a variable.

#### **Key Concepts**

Properties of Addition and Multiplication (p. 46):

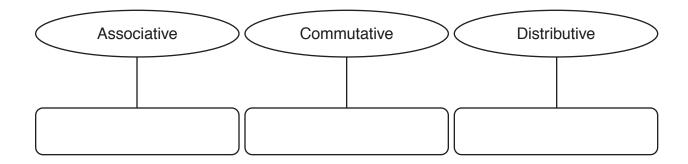
WORDS	NUMBERS	ALGEBRA
Commutative Property		
Associative Property		

#### **Distributive Property (p. 47):**

WORDS	NUMBERS	ALGEBRA

#### Think and Discuss (p. 49)

Get Organized In each box, give an example to illustrate the given property.



#### **Key Concepts**

#### Properties of Addition and Multiplication (p. 46):

WORDS	NUMBERS	ALGEBRA
Commutative Property You can add numbers in any order and multiply numbers in any order.	2 + 7 = 7 + 2 $3 \cdot 9 = 9 \cdot 3$	a+b=b+a $ab=ba$
Associative Property When you are only adding or multiplying, you can group any of the numbers together.	$6+8+2   7 \cdot 4 \cdot 5$ $= (6+8)+2 = (7 \cdot 4) \cdot 5$ $= 6+(8+2) = 7 \cdot (4 \cdot 5)$	a + b + c $abc= (a + b) + c = (ab)c= a + (b + c) = a(bc)$

#### Distributive Property (p. 47):

WORDS	NUMBERS	ALGEBRA
You can multiply a number by a sum or multiply by each number in the sum and then add. The result is the same.	3(4+8)=3(4)+3(8)	a(b+c) = ab + ac

#### Think and Discuss (p. 49)

Get Organized In each box, give an example to illustrate the given property.

