## Commutative Property of ADDITION

## Commutative Property of MULTIPLICATION

## Associative Property of ADDITION

## Associative Property of MULTIPLICATION

Distributive Property

- You can add numbers in any order and get the same answer.
- In your words: $\qquad$
- You can multiply numbers in any order and get the same answer.
- In your words:
$\qquad$
- When you add, you can group numbers together in any combination.
- In your words: $\qquad$
$\qquad$
- When you multiply, you can group numbers together in any combination.
- In your words: $\qquad$
$\qquad$
- You can use this property to multiply numbers mentally by breaking apart one of the numbers and writing it as a sum.
- In your words: $\qquad$

Numeric Ex: $\quad 6+4=4+6$

$$
10=10
$$

Algebraic Ex: $a+b=b+a$

Numeric Ex: $\quad 7 \bullet 8=8 \bullet 7$
$56=56$
Algebraic Ex: $\quad \mathbf{a b}=\mathbf{b} \mathbf{a}$
Numeric Ex: $\quad(4+5)+6=$ $4+(5+6)$

Algebraic Ex: $\quad(a+b)+c=$ $a+(b+c)$
Numeric Ex: $(2 \cdot 3) \cdot 5=$ $2 \cdot(3 \cdot 5)$

Algebraic Ex: (ab)c= abc)
Numeric Ex: $\quad 3(7+8)=$

$$
(3 \bullet 7)+(3 \bullet 8)
$$

Algebraic Ex: $\quad a(b+c)=$
(ab) + (ac)

