



LESSON
1-4

Review for Mastery

Properties of Numbers

You can use the Commutative Property, the Associative Property, and the Distributive Property with mental math to simplify expressions.

$16 + 47 + 14 = 47 + 16 + 14$	Commutative Property	$8 \cdot 3 \cdot 5 = 3 \cdot 8 \cdot 5$
$= 47 + (16 + 14)$	Associative Property	$= 3 \cdot (8 \cdot 5)$
$= 47 + 40$	Mental math	$= 3 \cdot 40$
$= 87$	Mental math	$= 120$

$9(28) = 9(20 + 8)$		$9(28) = 9(30 - 2)$
$= (9 \cdot 20) + (9 \cdot 8)$	Distributive Property	$= (9 \cdot 30) - (9 \cdot 2)$
$= 180 + 72$	Mental math	$= 270 - 18$
$= 252$	Mental math	$= 252$

Simplify each expression. Tell what properties you used.

1. $(45 + 39) + 25 = (39 + \underline{45}) + 25$ Commutative Property
 $= 39 + (\underline{45} + \underline{25})$ Associative Property
 $= 39 + \underline{70}$
 $= \underline{109}$

2. $25 \cdot 7 \cdot 4 = 25 \cdot \underline{4} \cdot \underline{7}$ Commutative Property
 $= (\underline{25} \cdot \underline{4}) \cdot \underline{7}$ Associative Property
 $= \underline{100} \cdot \underline{7}$
 $= \underline{700}$

3. $5(18) = 5 \cdot (10 + \underline{8})$
 $= (5 \cdot \underline{10}) + (5 \cdot \underline{8})$
 $= \underline{50} + \underline{40}$
 $= \underline{90}$

Distributive Property

4. $6(29) = 6 \cdot (30 - \underline{1})$
 $= (6 \cdot \underline{30}) - (6 \cdot \underline{1})$
 $= \underline{180} - \underline{6}$
 $= \underline{174}$

Distributive Property