

Commutative: [+ and x]
order doesn't matter

associative: t and x grouping doesn't matter

identity: (+0 or ×1)

get back what you started with

distributive: spread out the multiplication

Lesson 5 Skills Practice

Algebra: Properties

Determine whether the two expressions are equivalent. If so, tell what property is applied. If not, explain why.

1. $2 \cdot (3 \cdot 7)$ and $(2 \cdot 3) \cdot 7$

yes; Associative Property

2. 6 + 3 and 3 + 6

yes; Commutative Property

3. 26 - (9 - 7) and (26 - 9) - 7

no; the expressions equal 24 and 10. Associative 5. 7 · 2 and 2 · 7

ves; Commutative Property

4. 18 · 1 and 18

yes; Identity Property

6. 6 - (4 - 1) and (6 - 4) - 1

no; the expressions equal 3 and 1.

7. 7 + 0 and 7

yes; Identity Property

9. 625 + 281 and 281 + 625

yes; Commutative Property

8. 0 + 12 and 0

no; the expressions equal 12 and 0.

10. $(12 \cdot 18) \cdot 5$ and $12 \cdot (18 \cdot 5)$

yes; Associative Property

11. 2 + (8 + 2) and (2 + 8) + 2

yes; Associative Property

12. $40 \div 10$ and $10 \div 40$

no; the expressions equal 4 and $\frac{1}{4}$. Column does hot work the division

Use one or more properties to rewrite each expression as an expression that does not use parentheses.

13. $(p \cdot 1) \cdot 6 \ p \cdot 6$

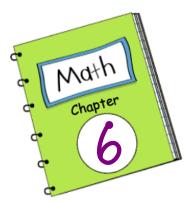
14.
$$(a + 5) + 23$$
 a + 28

15. $7 \cdot (y \cdot 3) \ y \cdot 21$

17. 6 + (x + 50) x + 56

16. (b+4)+17 **b** + **21**

18. $(y \cdot 200) \cdot 2 \ y \cdot 400$



TETLE: Expressions

Date	Lesson	Topic/Assignment		
2/17	1	Powers and Exponents Video Notes		
2/19	1	HOMEWORK: Pg437 WS		
2/22	2	Order of Operations Video Notes		
2/23	2	HOMEWORK: Pg445 WS		
2/23	2	CLASSWORK: Pg447 WS		
2/26	3	Variables and Expressions Video Notes		
3/2	3	CLASSWORK: Pg453 WS		
3/3	3	HOMEWORK: Skills Practice WS		
3/4	4	Writing Expressions Video Notes		
3/5	4	Pg464 Examples		
3/5	4	Skills and HW Practice WS		
3/9	5	Properties In-Class Notes		
3/9	5	CLASSWORK: Reteach WS		
3/9	5	HOMEWORK: Skills Practice WS		
3/10	5	GLASSWORK: Homework and Extra Practice WS		
3/11	6	Distributive Property Video Notes		
3/12	6	HOMEWORK: Pg488 WS		



Lesson 5 Homework Practice

Algebra: Properties

Determine whether the two expressions are equivalent. If so, tell what property is applied. If not, explain why.

1.
$$7 \cdot (6 \cdot t)$$
 and $(7 \cdot 6) \cdot t$

3.
$$18 - (7 - 3)$$
 and $(18 - 7) - 3$

6.
$$10 \div 5$$
 and $5 \div 10$

Use one or more properties to rewrite each expression as an expression that does not use parentheses.

7.
$$(b + 3) + 6$$

8.7 +
$$(3 + t)$$

9.9 •
$$(k • 5)$$

10.1 +
$$(h + 2)$$

- 11. GROCERY A grocery store sells an imported specialty cheese for \$11 and its own store-brand cheese for \$5. Write two equivalent expressions for buying one of each cheese and an unknown amount of other groceries.
- 12. CHECKING ACCOUNT Mr. Kenrick made three deposits to his account in this order: \$460, \$185, and \$240. Show how to use the Commutative Property to find the sum of the deposits mentally.
- 13. PETS Luzon has 8 fish, 3 cats, and 2 dogs. Write two equivalent expressions using the Associative Property that can be used to find the total number of pets.

Lesson 5 Extra Practice

Algebra: Properties

Determine whether the two expressions are equivalent. If so, tell what property is applied. If not, explain why.

1.
$$7 \cdot (3 \cdot 2)$$
 and $(7 \cdot 3) \cdot 2$

2.
$$16 \div 8$$
 and $8 \div 16$

5.
$$12 - (5 - 2)$$
 and $(12 - 5) - 2$

7.
$$32 + 4$$
 and $4 + 32$

8.
$$40 \div (8 \div 2)$$
 and $(40 \div 8) \div 2$



THE DESTREEUTEUE PROPERTY

THE DI	ESTRESUTEUE	PROPERTY	CONSENES
	(a)	XD	

EXAMPLES:

USE TO REEP TRACK OF YOUR .

Lesson 6 Skills Practice (Notes)

The Distributive Property

Find each product mentally. Show the steps you used.

1. 3×78

2.7 × 74

3. 8 × 92

4.6 × 57

5. $15 \times 2\frac{2}{3}$

6. $12 \times 5\frac{1}{6}$

7. 6 × 5.2

8.4 × 9.4

Use the Distributive Property to rewrite each algebraic expression.

9. 7(y+2)

10. (8+r)4

11. 8(x+9)

12. (b + 5)12

13. 4(2 + a)

14. 7(6 + v)

15. (*b* − 5)15

16. 3(5 - v)

17. 6(11-s)