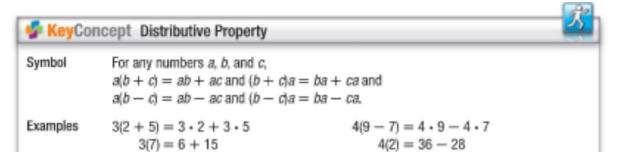
$$(n-4)$$
 $(x+3)$
Alg 1 1.4 $(x+3)$

Use the distributive property to evaluate expressions Use the distributive property to simplify expressions

term $2 \times +6$

like terms

$$(n-4)$$
 $(n-4)$ $(x+3)$ $3(n-4)=3n-12$



Real-World Example 1 Distribute Over Addition



SPORTS A group of 7 adults and 6 children are going to a University of South Florida Bulls baseball game. Use the Distributive Property to write and evaluate an expression for the total ticket cost.

Understand

Plan

Solve

a .	1	3	=	26
2.7 14				

USF Bulls Baseball Tickets				
Ticket	Cost (S)			
Adult Single Game	5			
Children Single Game (12 and under)	3			
Groups of 10 or more Single Game	2			
Senior Single Game (65 and over)	3			

Source: USA

144419

Check

SPORTS A group of 3 adults, an 11-year old, and 2 children under 10 years old
are going to a baseball game. Write and evaluate an expression to determine the
cost of tickets for the group.

$$3.5 + 1.3 + 2.3$$

 $1-1190$ $15 + 3 + 6 = 24$
 2.4
 $3.5 + 3.3$
 15.49
 2.4

Example 2 Mental Math

PT

Use the Distributive Property to rewrite 7 • 49. Then evaluate.

$$7 \cdot 49 = 7(50 - 1)$$

Think:
$$49 = 50 - 1$$

$$= 7(50) - 7(1)$$

Distributive Property

$$= 350 - 7$$

Multiply.

$$= 343$$

Subtract.

7.49 = 343 7(50+1)

GuidedPractice

4560

Use the Distributive Property to rewrite each expression. Then evaluate.

2B. $44 \cdot 2\frac{1}{2}$

2D, 52(17)

*5 (260 +10

1000 +50 = 1050

Example 3 Algebraic Expressions

Rewrite each expression using the Distributive Property. Then simplify.

a.
$$7(3w + 5)$$

3A.
$$(8 + 4n)2$$

3B.
$$-6(r + 3g - t)$$

3D.
$$-4(-8+3m)$$

32+12m

