

Sara and Joe went to McDonalds.  
Write an expression to represent  
the food they ordered:



Let  $c$  = # of cheeseburgers  
 $f$  = # of large french fries  
 $p$  = # of large pops  
 $n$  = # of chicken nuggets

$$3c + f + 2p$$

Then Molly and Mark decided  
to place the same order.

$$3c + f + 2p$$

Write an expression to show how you can find the total  
food ordered by Sara, Joe, Molly and Mark.

$$3c + f + 2p + 3c + f + 2p = 6c + 2f + 4p$$

OR

$$2(3c + f + 2p) = 6c + 2f + 4p$$

The Family Deal at Pizza Hut includes: Let  $p$  = # of pieces of pizza  
 $b$  = # of breadsticks  
 $w$  = # of wings  
 $n$  = # of bottles of pop



Write an expression to represent the Family Deal.

$$16p + 5b + 8w + n$$

At the end of the season, the volleyball team had a pizza  
party. To feed everyone, they ordered 3 Family Deals.  
Write an expression to represent the food they ordered.

$$3(16p + 5b + 8w + n) = 48p + 15b + 24w + 3n$$

### 3.2.7: Simplify Using the Distributive Property

The  
Distributive Property

$$a(b + c) = ab + ac$$

$$2(4c + 9)$$

$$8c + 18$$

$$3(7a + 2b + 4)$$

$$21a + 6b + 12$$

$$4(11h - 5)$$

$$44h - 20$$

same answer

$$-5(3x + 8)$$

$$-15x - 40$$

$$-3(-2m + n)$$

$$-15x - 40$$

$$6m - 3n \text{ or } 6m + -3n$$

$$-1(3x + 4y + z)$$

$$-3x + 4y + z$$

Simplify Using the  
Distributive Property

$$3(4 + 2m)$$

$$12 + 6m$$

$$-1(2x + 7)$$

$$-2x + 7$$

$$2(4x + 3)$$

$$8x + 6$$

$$6(-3x + 2)$$

$$-18x + 12$$

$$(-2x + 1)(-3)$$

$$6x + 3$$

$$-1(-x + 2)$$

$$x + 2$$