

**MY Homework****Lesson 1****Addition Properties****Homework Helper**Need help? [connectED.mcgraw-hill.com](http://connectED.mcgraw-hill.com)

Jaycee bought 3 yellow apples and 4 green apples.  
Marshall bought 4 yellow apples and 3 green apples.  
How many apples did each person buy?

$3 + 4 = 7$

$4 + 3 = 7$

Commutative  
Property of Addition

They each bought 7 apples. The order in which the addends are added does not change the sum.

You learned two other addition properties.

The Identity Property shows the sum of any number and zero is the number.

$7 + 0 = 7$

The Associative Property shows the way the addends are grouped does not change the sum.

$$\begin{aligned}(7 + 4) + 3 &= 7 + (4 + 3) \\ &= 7 + 7 \\ &= 14\end{aligned}$$

**Practice**

Draw lines to match each property of addition with its correct example.

1.  $3 + 4 = 7$      $4 + 3 = 7$  ——— Commutative Property of Addition

2.  $7 + 0 = 7$  ——— Associative Property of Addition

3.  $7 + (3 + 4) = (7 + 3) + 4$  ——— Identity Property of Addition

Find each sum. Identify the addition property.

4.  $46 + 0 = \underline{46}$

Identity Property

5.  $(7 + 9) + 3 = \underline{19}$      $7 + (9 + 3) = \underline{19}$

Associative Property

Find each sum mentally.

6.  $(6 + 8) + 2 = \underline{16}$

7.  $3 + (2 + 4) = \underline{9}$



## Problem Solving

8. **Mathematical PRACTICE** **Make Sense of Problems** Pedro and Jamal collected yellow and red leaves. They each collected the same total number of leaves. How many red leaves did Jamal collect?

9 red leaves



Pedro's leaves



Jamal's leaves

## Vocabulary Check



Draw a line to match the vocabulary word(s) to its example.

- |                          |                                       |
|--------------------------|---------------------------------------|
| 9. Commutative Property  | • symbols which show grouping         |
| 10. parentheses          | • $(3 + 1) + 4 = 8$ $3 + (1 + 4) = 8$ |
| 11. Identity Property    | • $5 + 6 = 11$ $6 + 5 = 11$           |
| 12. Associative Property | • $2 + 0 = 2$                         |

## Test Practice

13. Which number sentence is an example of the Associative Property?

- (A)  $5 + 1 = 3 + 3$                       (C)  $(8 + 2) + 5 = 8 + (2 + 5)$   
 (B)  $583 + 0 = 583$                       (D)  $3 + 5 = 5 + 3$