

Name: _____

Monday HW

Addition Properties

Commutative Property of Addition

You can add numbers in any order.

example: $2 + 3 + 7 = 12$
 $7 + 3 + 2 = 12$

$$2 + 3 + 7 = 7 + 3 + 2$$

Associative Property of Addition

You can group addends different ways, and the sum will not change. Addends are grouped with parenthesis. (You add the part in parenthesis first.)

example: $(4 + 3) + 9 = 16$
 $4 + (3 + 9) = 16$

$$(4 + 3) + 9 = 4 + (3 + 9)$$

Part I: Find the missing numbers. Also, tell which property is used.

1. $9 + 5 = 5 + \underline{\hspace{2cm}}$

property: _____

2. $2 + (4 + 10) = (2 + \underline{\hspace{2cm}}) + 10$

property: _____

3. $(4 + 11) + \underline{\hspace{2cm}} = 4 + (11 + 7)$

property: _____

4. $2 + \underline{\hspace{2cm}} + 3 + 6 = 6 + 3 + 2 + 3$

property: _____

Part II: Re-write each problem three different ways using the commutative property.

5. $1 + 2 + 3 + 4 = 10$

6. $9 + 8 + 1 = 18$

Part III: Change the position of the parenthesis to re-write each problem.

7. $(7 + 10) + 2 = 19$

8. $4 + (5 + 2) = 11$

9. $(3 + 6) + 6 = 15$

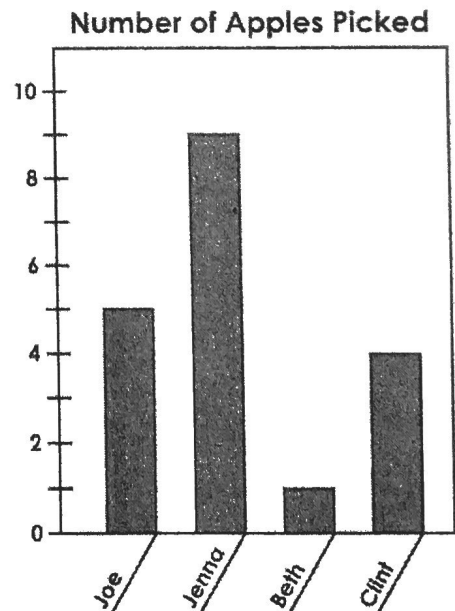
10. $10 + (4 + 1) = 15$

Part IV: Think and write.

11. Do you think there is a commutative property of subtraction? Tell why or why not.

12. The Cooper family has an apple tree in their backyard. Mrs. Cooper asked her children to pick some apples and bring them to the house so she can bake apple pies. The graph below shows how many apples each of her children picked.

Use the commutative property of addition to write four different number sentences that show how many apples they picked in all.

_____

Name: _____

Tuesday HW

Addition Properties

Commutative Property of Addition

You can add numbers in any order.

example: $49 + 86 + 321 = 456$
 $321 + 49 + 86 = 456$

Associative Property of Addition

You can group addends different ways, and the sum will not change. Addends are grouped with parenthesis. (You add the part in parenthesis first.)

example: $(183 + 12) + 26 = 221$
 $183 + (12 + 26) = 221$

Write each sum. Tell which property is used.

examples: $(134 + 534) + 37 = \underline{705}$
 $134 + (534 + 37) = \underline{705}$
property: associative

$1,238 + 299 = \underline{1,537}$
 $299 + 1,238 = \underline{1,537}$
property: commutative

1. $874 + 235 = \underline{\hspace{2cm}}$

$235 + 874 = \underline{\hspace{2cm}}$

property: _____

2. $549 + (605 + 771) = \underline{\hspace{2cm}}$

$(549 + 605) + 771 = \underline{\hspace{2cm}}$

property: _____

3. $(\$2.83 + \$5.35) + \$9.57 = \underline{\hspace{2cm}}$

$\$2.83 + (\$5.35 + \$9.57) = \underline{\hspace{2cm}}$

property: _____

4. $999 + 693 = \underline{\hspace{2cm}}$

$693 + 999 = \underline{\hspace{2cm}}$

property: _____

5. $1,077 + 1,770 + 797 = \underline{\hspace{2cm}}$

$797 + 1,077 + 1,770 = \underline{\hspace{2cm}}$

property: _____

6. $8,765 + (5,411 + 203) = \underline{\hspace{2cm}}$

$(8,765 + 5,411) + 203 = \underline{\hspace{2cm}}$

property: _____

Name: _____

Wednesday HW

Addition Properties

Identity Property of Addition (Zero Property of addition)

When you add zero to any number, the sum is that number.

example: $29 + 0 = 29$

Commutative Property of Addition

You can add numbers in any order.

example: $2 + 3 + 7 = 12$
 $7 + 3 + 2 = 12$

$2 + 3 + 7 = 7 + 3 + 2$

Associative Property of Addition

You can group addends different ways, and the sum will not change. Addends are grouped with parenthesis. (You add the part in parenthesis first.)

example: $(4 + 3) + 9 = 16$
 $4 + (3 + 9) = 16$

$(4 + 3) + 9 = 4 + (3 + 9)$

Find the value of the variables. Also, tell which property is used.

1.

$$6 + 3 + 9 = a$$

$$3 + b + 6 = 18$$

a = _____

b = _____

property: _____

2.

$$10 + (10 + 5) = c$$

$$(10 + d) + 5 = 25$$

c = _____

d = _____

property: _____

3.

$$(12 + e) + 7 = 21$$

$$12 + (2 + 7) = f$$

e = _____

f = _____

property: _____

4.

$$102 + g = 102$$

$$h + 0 = 102$$

g = _____

h = _____

property: _____