SETScholars Math Worksheet

Class / Year / Grade 1 – Worksheet 43

Understanding the Basic Number Properties of Addition

Addition is classified as one of the four basic operations of arithmetic that involves the action or process of adding two or more numbers to get the result. In lined with the said concept, addition has different kinds of properties that serves as a guide to understand and perform the operation better.

3 + 2 = 5

2 + 3 = 5

Hi! I want to ask you something. Is my dog food equation right?

BASIC NUMBER PROPERTIES OF ADDITION

The idea behind basic properties are thought to be simple: common sense

BASIC NUMBER PROPERTIES OF ADDITION

COMMUTATIVE PROPERTY

❖ When two or more numbers are added, the sum is the same regardless of the order of the addends
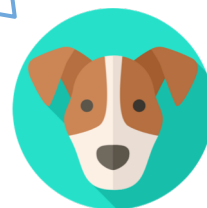
❖ $a + b + c = c + b + a$

❖ $a + b = b + a$

EXAMPLE

★ $3 + 2 = 2 + 3$

Sum: $5 = 5$

★ $3 + 2 + 1 = 1 + 2 + 3$

Sum: $6 = 6$

ASSOCIATIVE PROPERTY

EXAMPLE

★ $3 + (4 + 5) = (3 + 4) + 5$

$12 = 12$

★ $(1 + 2) + 3 = 1 + (2 + 3)$

$6 = 6$

❖ When three or more numbers are added, the sum is the same regardless of the grouping of the addends

❖ $(a + b) + c = a + (b + c)$

❖ When adding zero to any number, the sum remains the original number

❖ $a + 0 = a$
❖ $0 + b = b$

IDENTITY PROPERTY

EXAMPLE
★ $3 + 0 = 3$
★ $0 + 4 = 4$

EXERCISE

Identify the basic properties of addition in each given. Write the properties and the sum of each equation.

$8 + 0$

Solution / Sum:

Property:

$9 + 5 = 5 + 9$

Solution / Sum:

Property:

Solution / Sum:

$6 + (7 + 8) = (6 + 7) + 8$

Property:

ARF! WHAT IS MY NAME?

Now is the time to get to know the dog's name! Identify what kind of basic properties of addition is being described in each given. Write your answer on the space given.

1.

The sum is the same regardless of the grouping of the addends
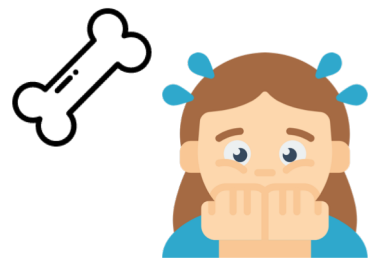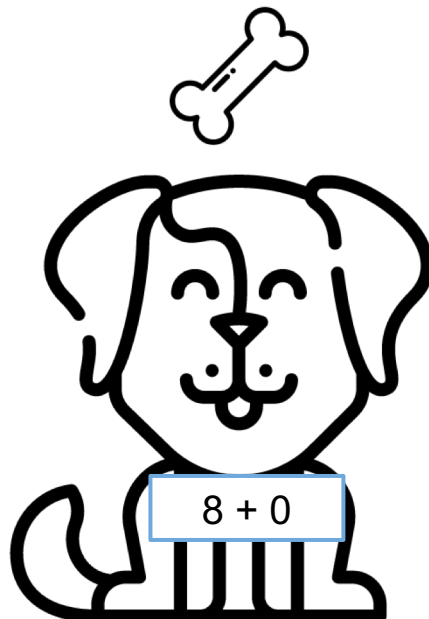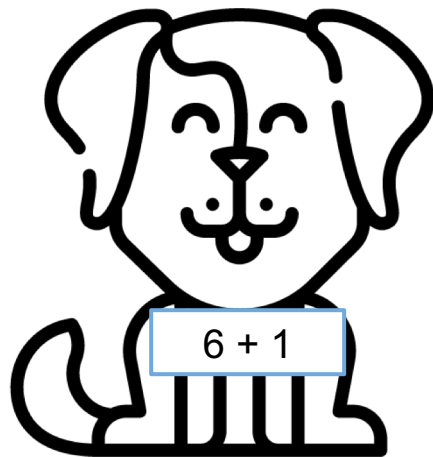
2.

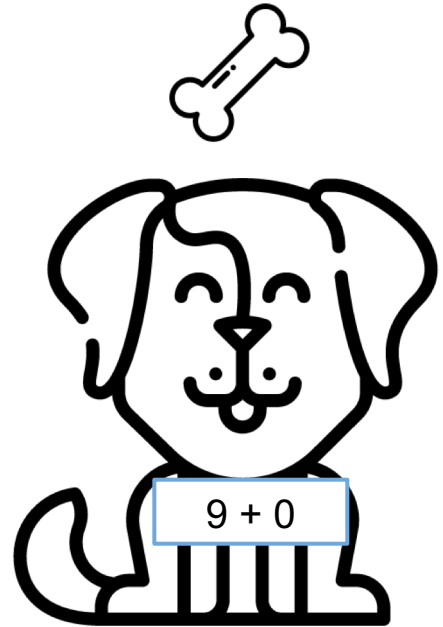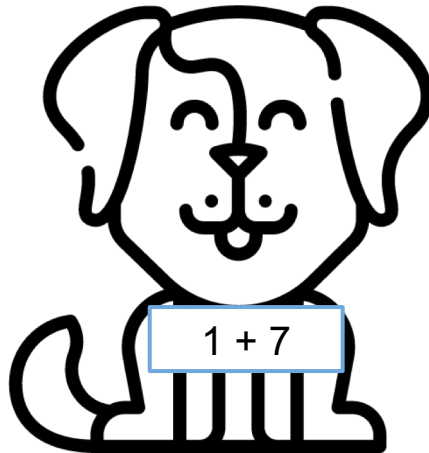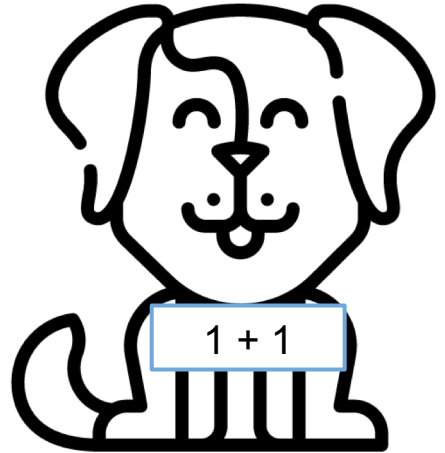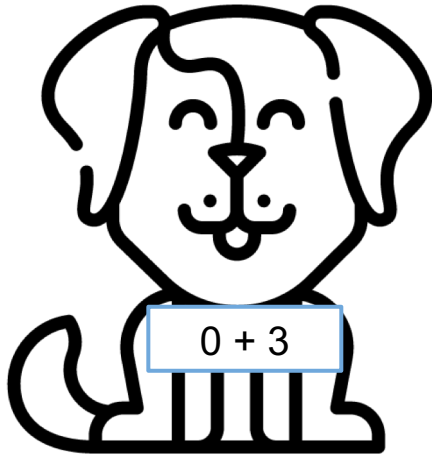The sum remains the original number

3.

The sum is the same regardless of the order of the addends

WHERE ARE MY PUPPIES?

Help Mary find all her pet puppies! Color the puppies that show an identity property given.

0 + 3

1 + 1

1 + 7

6 + 1

9 + 0

8 + 0

THE BARK VILLAGE'S ASSOCIATIVE PROPERTY

Here are the associates for Bark's Village! Determine the group of addends that applies the associative property of addition.

1. $8 + (4 + 2) = $ ____

2. $9 + (3 + 6) = $ ____

3. $7 + (7 + 4) = $ ____

4. $(8 + 7) + 4 = $ ____

5. $(2 + 9) + 3 = $ ____

6. $(5 + 7) + 4 = $ ____

SNOOPY'S COMMUTATIVE ROLL

Help Snoopy roll some dice! Roll 2 dice and write an addition sentence on the left column. On the right column, use the commutative property to make a related addition sentence. An example has been done for you when rolling a 5 and a 6.

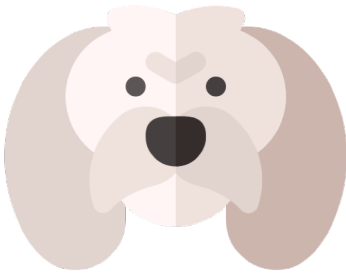| ROLL AND ADD	COMMUTATIVE PROPERTY
5 + 6 = 11	6 + 5 = 11

THE BARKING SESSION

When you group the same addends differently, will you still get the same sum? Simply explain.

1.

_____

_____

_____

How could you change 2 group of addends in an equation while maintaining the same sum?

_____

_____

_____

2.

PUP'S WAY HOME

Let us join Pup on his way home! Find the sum in each given. Afterwards, name the addition property that is used.

3.

★ 8 + 0 =

★ 0 + 8 =

Property:

2.

★ 10 + 9 =

★ 9 + 10 =

Property:

1.

6 + (3 + 2) = (6 + 3) + 2

6 + _____ = _____ + 2

_____ = _____

Property:
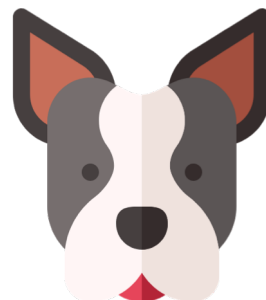
BARK ACADEMY'S ENTRANCE TEST

Help Luna and Oreo pass their tests! Identify what is being asked in each problem. Color the correct answer.

1.

Which equations show the identity property of addition?

3 + 0	7 + 1
2 + 9	0 + 4

2.

Which equation shows the associative property of addition?

(8 + 7) + 6 = 8 + (7 + 6)	6 x (5 x 4) = (6 x 5) x 4
7 + (5 x 9) = (7 + 5) x 9	4 + 3 + 2 = 3 + 4 + 2

3.

Which equations show the commutative property of addition?

7 + 3 = 3 + 10	6 + 4 = 4 x 6
8 + 5 = 5 + 8	9 + 1 = 9 + 1

ARF-ARF?

1. "13 = 8 + 5" is an example of commutative property of addition.

2. "25 + 0 = 25 is an example of identity property of addition.
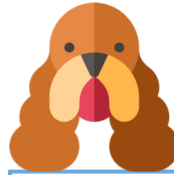
3. "1 + (2 + 3) = (1 + 2) + 3" is an example of associative property of addition.

4. "4 + 7 = 4 + 7" is an example of commutative property of addition.