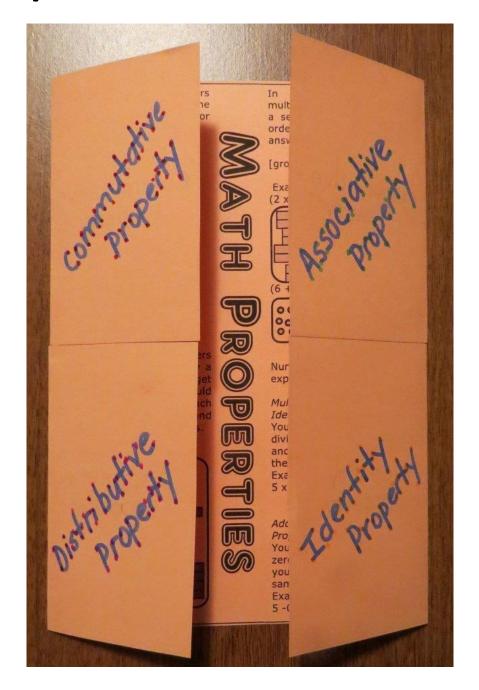
## Math Properties

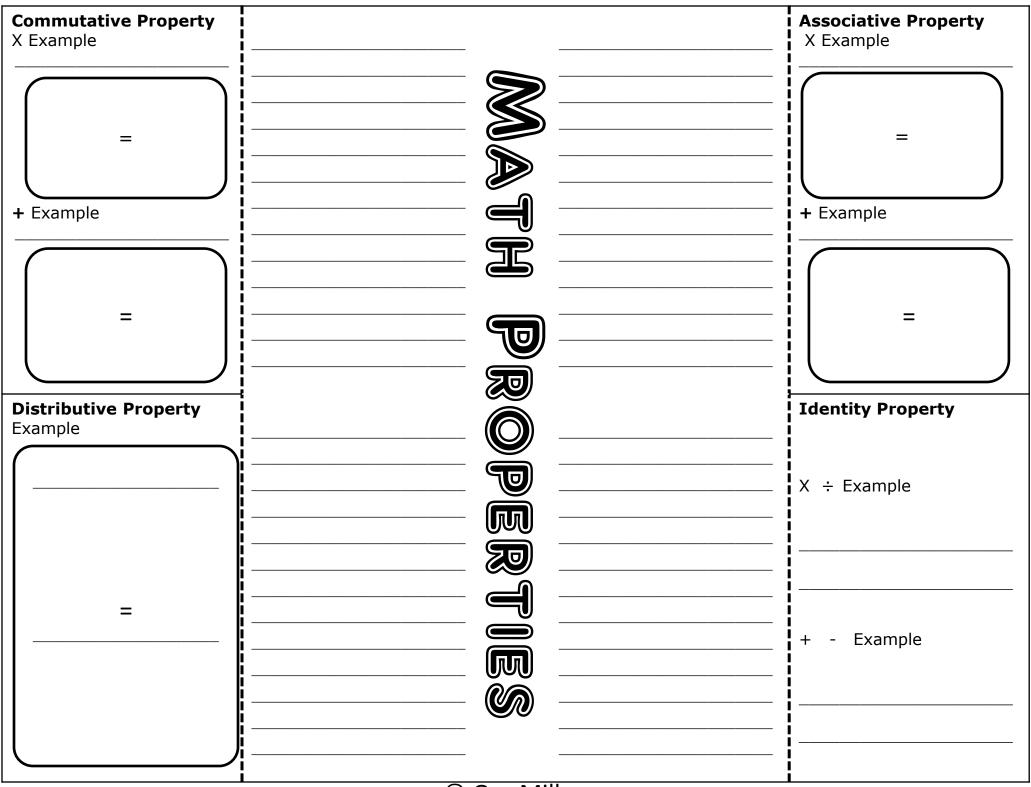
Three versions of the organizer are offered: one with blanks for students to write definitions and examples; one with the definitions provided but with blank spaces for key words plus students spaces for to create examples; and one with the answers provided. The third copy of the organizer may be used as an answer key, for differentiated instruction, for students who were absent during instruction, or if you wish for the students to have cards already completed.

## Instructions for Completing the Organizer:

- 1. Print the organizer onto colored paper.
- 2.Trim the edges.
- 3. Fold on the dotted line.
- 4.Cut on the solid lines between flaps up to the dotted fold line.
- 5. Have students fill in missing information.

The graphic organizers will fit into an interactive notebook after the edges are trimmed.



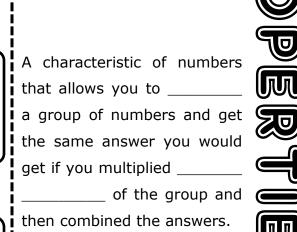


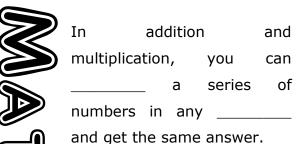
© Gay Miller

Commutative Property Examples
x = x
=
+_=_+_
+ = +
Distributive Property
Example x ( + )
= (x)+(x)

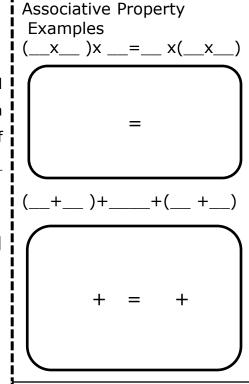
You can swap numbers i around and still get the \_\_\_\_\_ answer when you \_\_\_\_\_ or \_\_\_\_

[interchangeable in \_\_\_\_\_]





doesn't matter]



**Identity Property** 

Numbers that keep their expressions the same.

Multiplicative/Division Identity Property: You can multiply \_\_\_\_\_ [or divide by \_\_\_\_\_\_] to any number and your number will stay the same.

Additive/Subtractive Identity Property: You can add \_\_\_\_\_ [or

subtract \_\_\_\_\_\_ to any number and your number will stay the same.

X ÷ Example

- Example

M

You can swap numbers around and still get the same answer when you add or multiply.

[interchangeable in order]

Examples  $4 \times 2 = 2 \times 4$ 

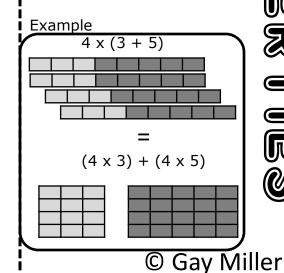
$$6 + 3 = 3 + 6$$

A characteristic of numbers that allows you to multiply a group of numbers and get the same answer you would get if you multiplied each member of the group and then combined the answers.

## Distributive Property

Commutative

Property

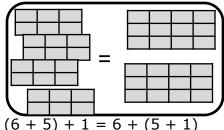


In addition and multiplication, you can group a series of numbers in any order and get the same answer.

[grouping doesn't matter]

Examples

$$(2 \times 3) \times 4 = 2 \times (3 \times 4)$$



$$\begin{bmatrix}
0 & 0 & \Delta \\
0 & 0 & \Delta \\
0 & 0 & \Delta
\end{bmatrix} + 
\begin{bmatrix}
0 & \Delta \\
0 & 0 & \Delta
\end{bmatrix}$$

Numbers that keep their expressions the same.

Multiplicative/Division Identity Property:

You can multiply one [or divide by one] to any number and your number will stay the same.

Example  $5 \times 1 = 5$ 

屼

Additive/Subtractive Identity Property:

You can add zero [or subtract zero] to any number and your number will stay the same.

Example 5 - 0 = 0

Associative Property

Identity Property

