## Helping With Math

## Understanding Commutative and Associative Property of Addition

## GRADE 1



There are four mathematical properties which involve addition. Two of these are Commutative and Associative Property.

## Commutative Property

When we add two or more whole numbers, their sum is the same, regardless of the order of the addends.


Example: $2+4=4+2=6$


The sum of both $2+4$ and $4+2$
is 6 . That means, we can add whole numbers in any order.

## Understanding Associative Property of Addition

## Associative Property

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

For example $(4+2)+3=4+(2+3)$

( 4 gray cars +2 red cars) +3 blue cars $=9$ cars


4 gray cars + ( 2 red cars +3 blue cars ) $=9$ cars


Here, the addends are 2, 4 and 3 . The sum of the three numbers will remain the same, no matter how we group them.

$$
\text { So, }(4+2)+3=4+(2+3)=9
$$

## Stop, Look and Try this!

Encircle the correct answer.

Which of these is a correct example of commutative property of addition?

$$
3+5=4+4
$$

$$
3+5=5+3
$$

$$
2+2+2=3+3 \quad 1+(2+5)=(1+2)+5
$$

Which of these is a correct example of the associative property of addition?
$(1+2+3)=3+1+4$
$(4+9)+2=4+(9+2)$

Which of these is a correct example of the commutative property of addition?

$$
3+8=8+3 \quad 5+7=12+5
$$

## TABLE OF ACTIVITIES

1. Chug! Chug!
2. Counting Cars
3. Train Connect
4. Delivery Truck
5. Sky's the Limit
6. Finish the Race
7. Sailing Boat
8. Fly High
9. School Bus
10. Draw your Wheel

## CHUG! CHUG!

Color the train that has the same sum as:

(2) $1+7=$

(3) $9+5=$


## COUNTING CARS

Write the equation represented by each group of vehicles and then use the commutative property of addition to complete the equations below.


Understanding Commutative and Associative Property of Addition

## TRAIN CONNECT

Cut out the part of the train and paste them to its corresponding engine. Use the associative property of addition to do this.


Understanding Commutative and Associative Property of Addition

## DELIVERY TRUCK

Put the boxes to the delivery trucks with label - commutative property or associative property.


$$
(5+4)+9=5+(4+9)
$$

$$
8+2=2+8
$$

$$
12+23=23+12
$$

$$
7+(8+2)=(7+8)+2
$$

## SKY'S THE LIMIT

Cross out the planes that show associative property of addition.

$$
(2+3)+1=2+(3+1)
$$

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

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

$$
4+7=7+4
$$

## FINISH THE RACE

Finish the race by completing the missing number using commutative property of addition.


$$
6+8=8+
$$

$$
10+\ldots=5+10-15+8=
$$

$$
\ldots+15
$$

$\qquad$ $+12$

## SAILING BOAT

Match the boat to its corresponding sail to present the use of commutative property of addition.


Understanding Commutative and Associative Property of Addition

## FLY HIGH

Color the equation that shows commutative property with blue and associative property gray. Find out what figure you formed.


## SCHOOL BUS

Cut the students and paste them to the window of the school bus where they belong. Class A is Associative Property and Class B is Commutative Property.


$$
\underset{\text { Class A }}{\text { SCHOS }}
$$


$12+6=6+12$


SCHOOL BUS
Class B

## DRAW YOUR WHEEL

## Draw a car wheel to represent the equation.

1. $2+1=1+2$
$\square \mathrm{Can}$
2. $1+(2+3)=(1+2)+3$


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