

# SETScholars Math Worksheet

## Class / Year / Grade 1 – Worksheet 41

### Understanding Commutative and Associative Property of Addition

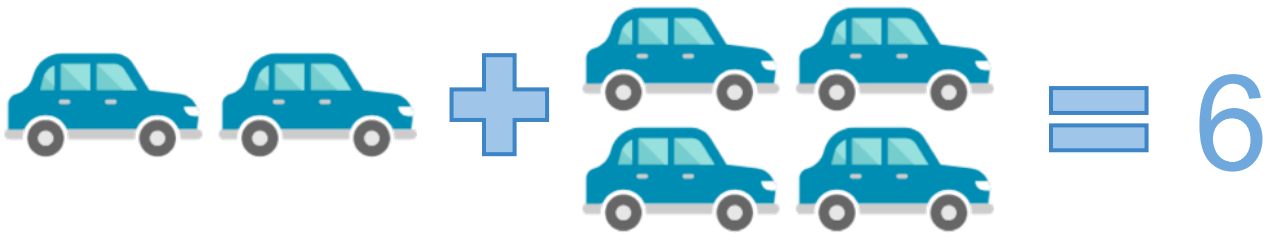
There are four mathematical **properties** which involve **addition**. Two of these are **Commutative** and **Associative** Property.

#### Commutative Property

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



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



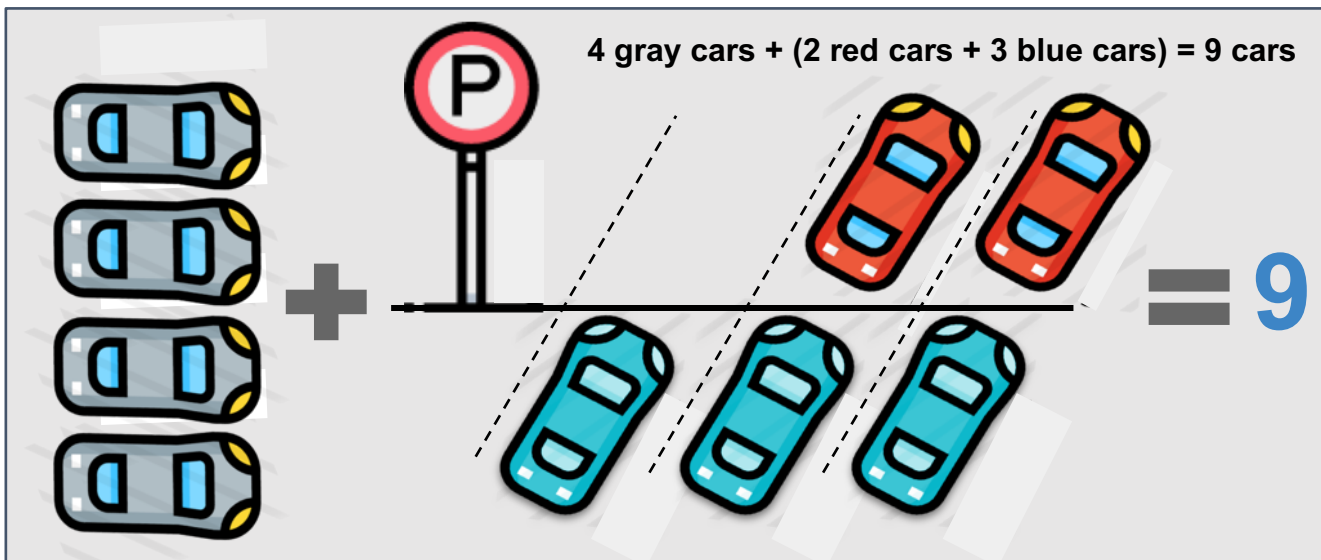
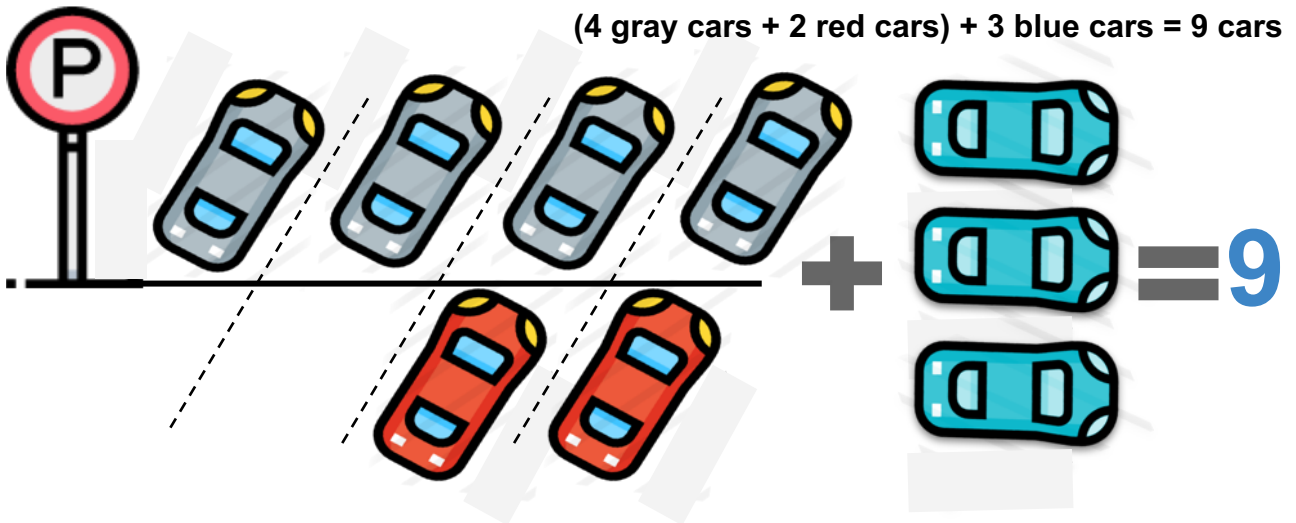
The sum of both  $2 + 4$  and  $4 + 2$  is 6. That means, we can add whole numbers in any order.

# 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.

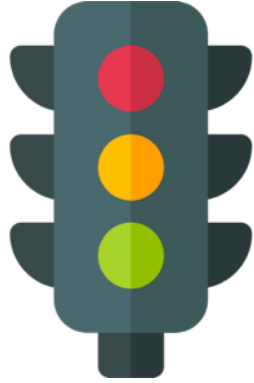
For example  $(4 + 2) + 3 = 4 + (2 + 3)$



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.



1

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

$$3 + 5 = 4 + 4$$

$$5 + 3$$

$$3 + 5 =$$

2

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

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

$$1 + (2 + 5) = (1 + 2) + 5$$

3

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

$$(1 + 2 + 3) = 3 + 1 + 4$$

$$(4 + 9) + 2 = 4 + (9 + 2)$$

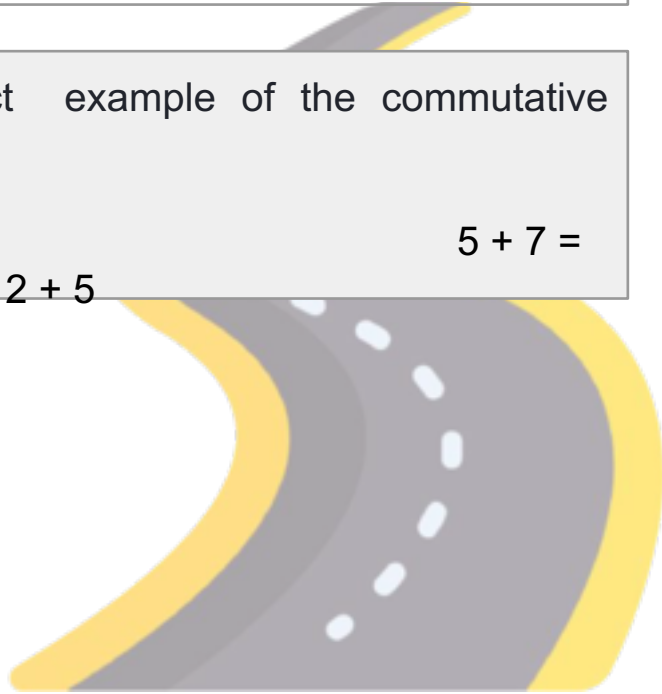
4

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

$$3 + 8 = 8 + 3$$

$$12 + 5$$

$$5 + 7 =$$

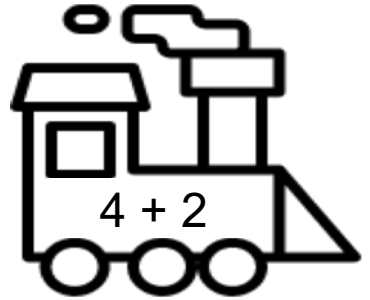
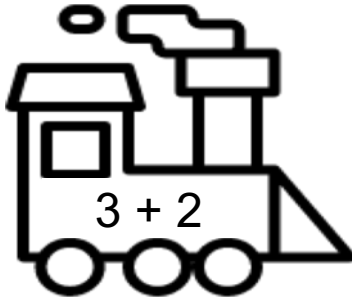
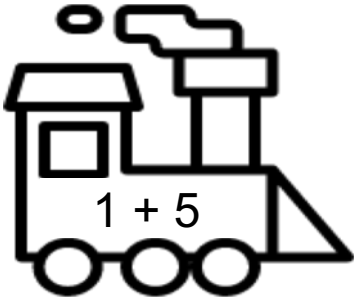


# CHUG! CHUG!

Color the train that has the same sum as:

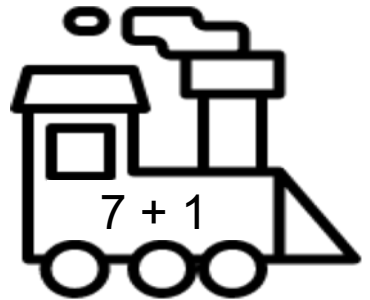
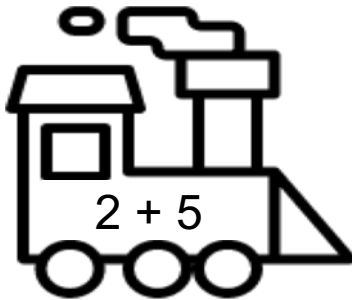
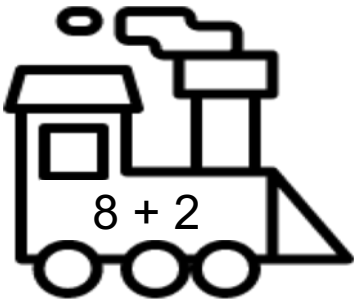
1

$$2 + 3 =$$



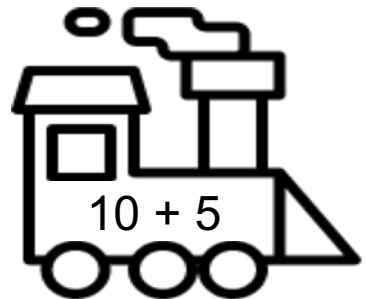
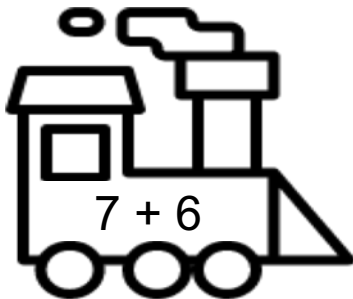
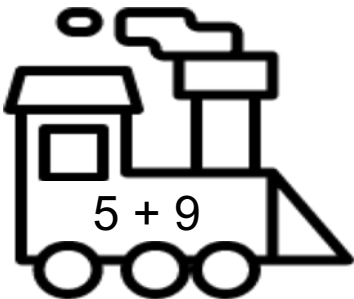
2

$$1 + 7 =$$



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.

4 blue cars + 3 black cars = 3 black cars + 4 blue cars

+  =  +

1 black car + 2 blue cars = 2 blue cars + 1 black car

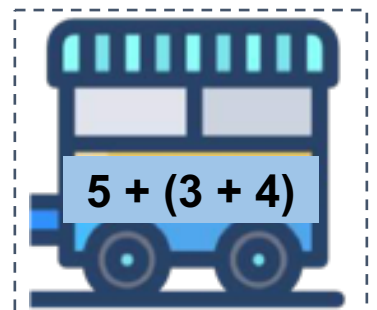
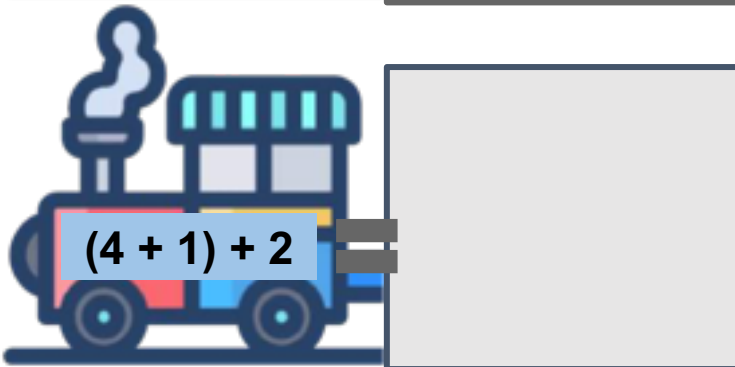
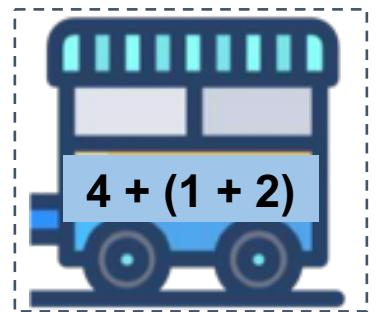
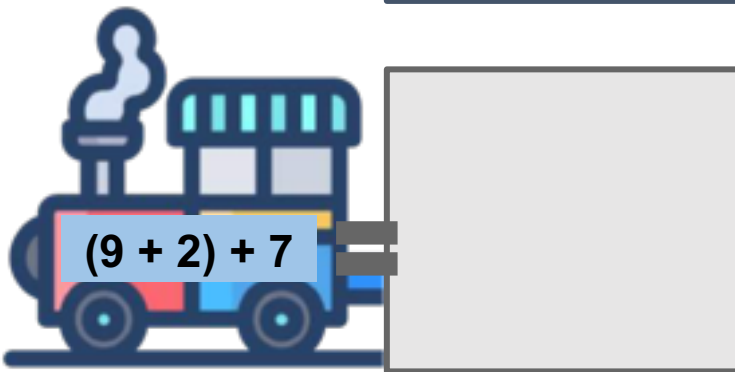
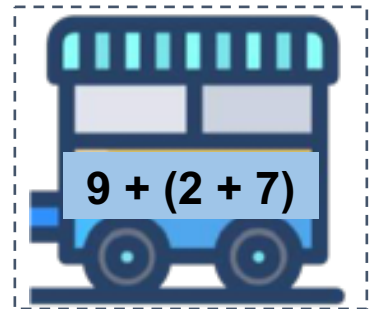
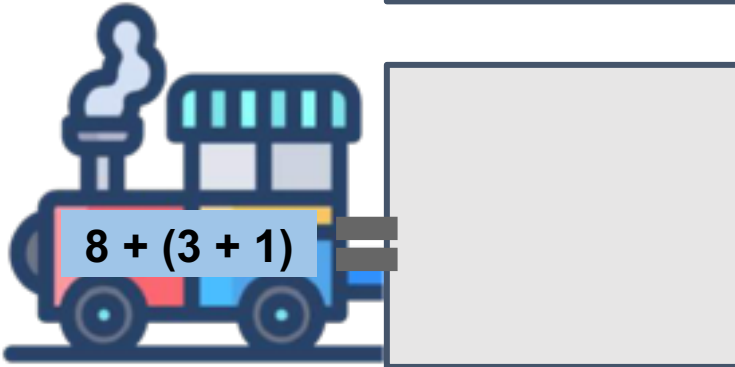
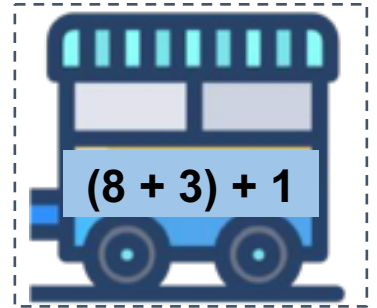
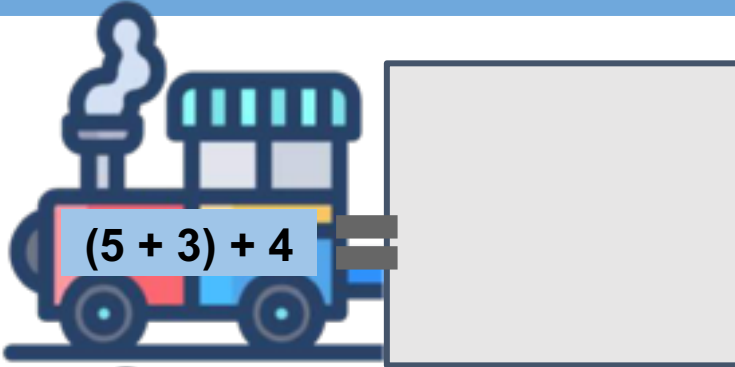
+  =  +

6 blue cars + 5 black cars = 5 black cars + 6 blue cars

+  =  +


# TRAIN CONNECT

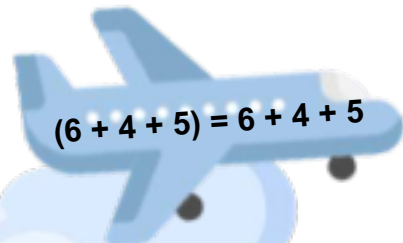
Cut out the part of the train and paste them to its corresponding engine. Use the associative property of addition to do this.

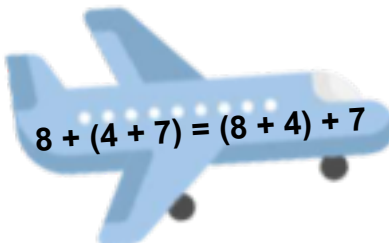


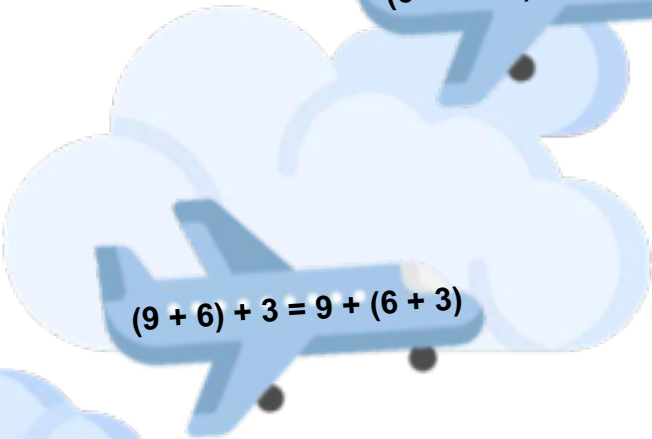
# SKY'S THE LIMIT

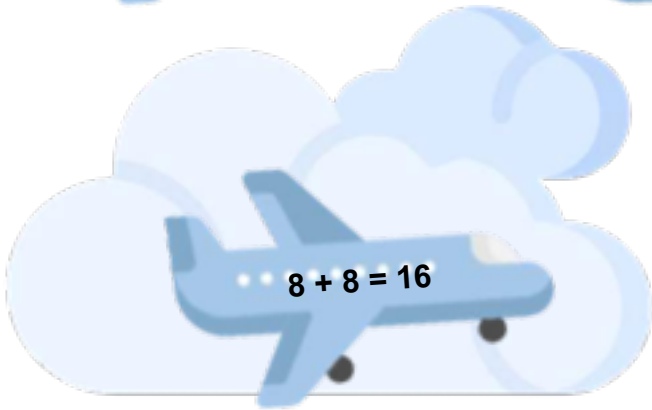
Cross out the planes that show associative property of addition.

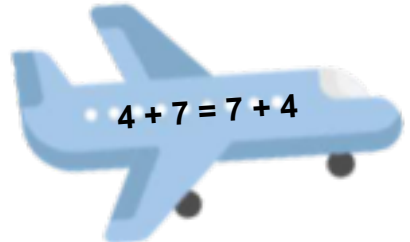

$$(2 + 3) + 1 = 2 + (3 + 1)$$


$$(6 + 4 + 5) = 6 + 4 + 5$$


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


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


$$8 + 8 = 16$$


$$4 + 7 = 7 + 4$$

# FINISH THE RACE

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

$1 + 2 = \_ + 1$

$\_ + 5 = 5 + 9$

$6 + \_ = 1 + 6$

$2 + 4 = \_ + 2$

**START**



$4 + 3 = 3 + \_$

$9 + \_ = 7 + 9$

$6 + 8 = 8 + \_$

$10 + \_ = 5 + 10$

$15 + 8 = \_ + 15$

$3 + 5 = 5 + \_$

**FINISH**

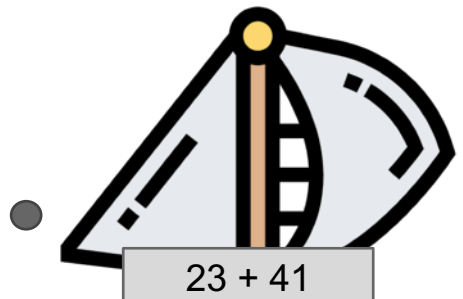
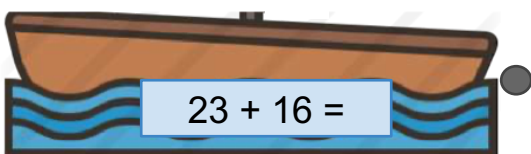
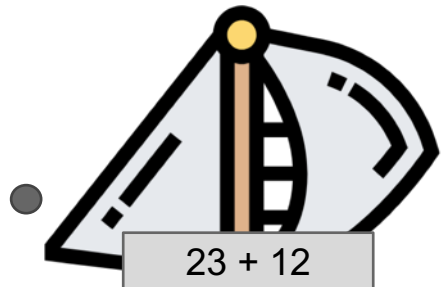
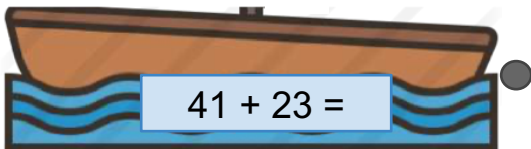
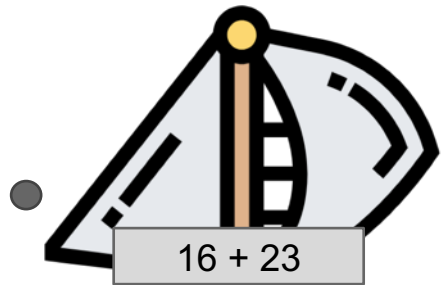
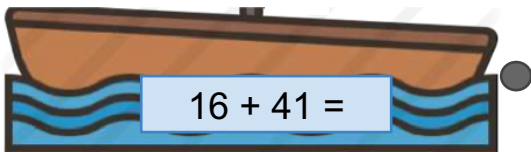
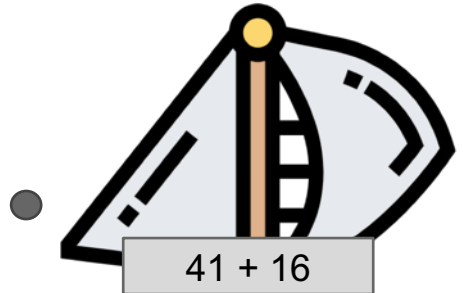
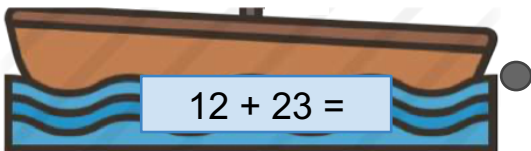
$\_ + 14 = 14 + 11$

$12 + 23 = \_ + 12$



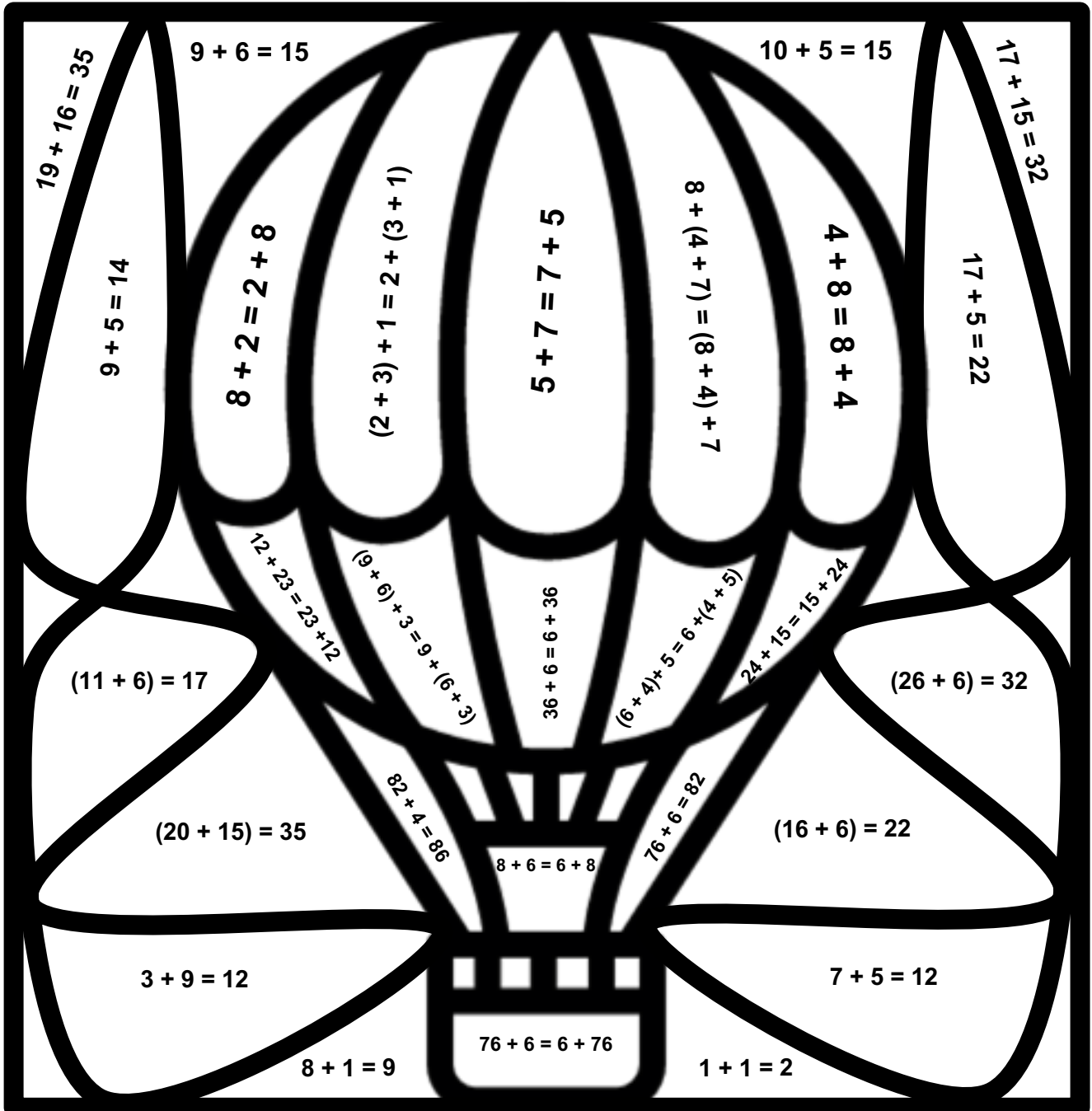
# SAILING BOAT

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



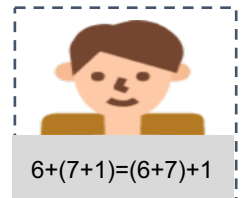
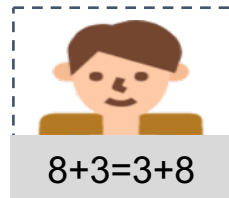
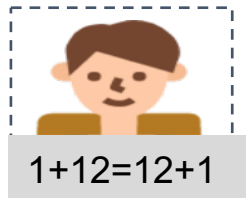
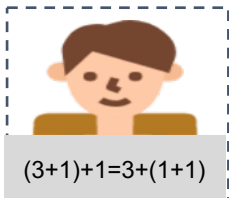
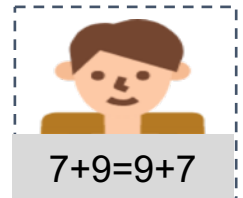
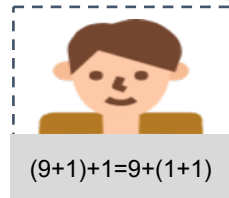
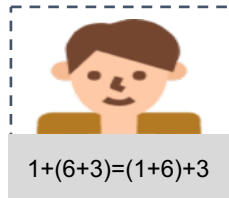
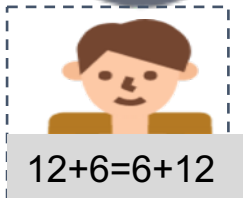
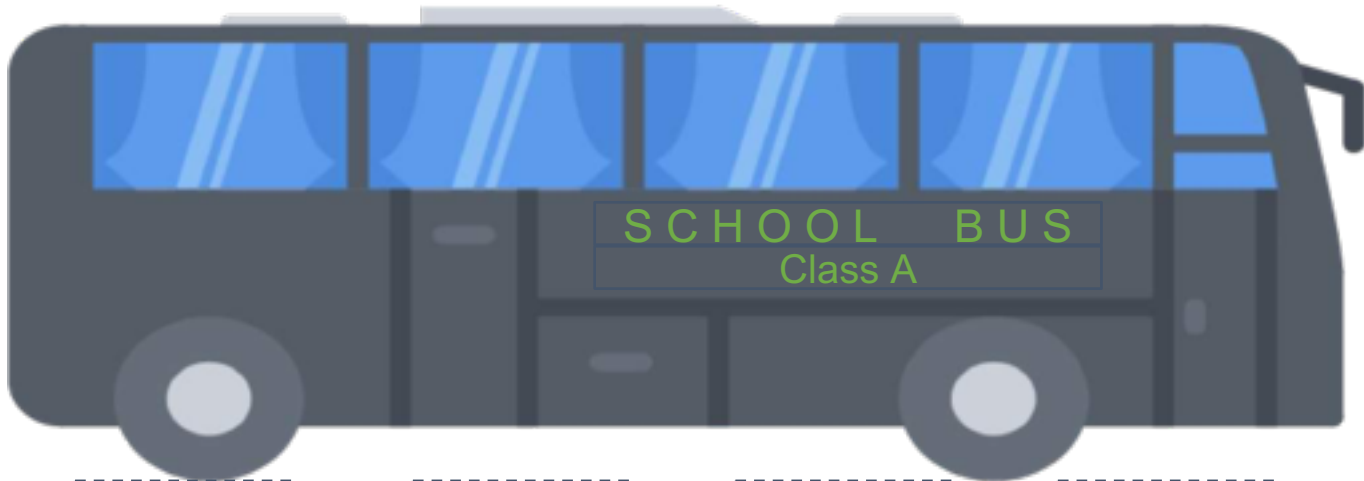
# FLY HIGH

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.

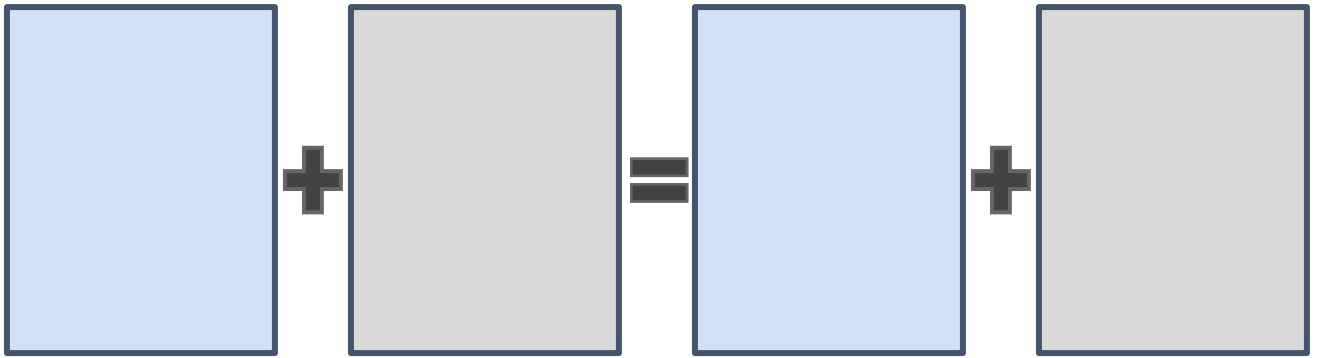


# DRAW YOUR WHEEL



Draw a car wheel  to represent the equation.

1.  $2 + 1 = 1 + 2$



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

