## tutorified

## 4.OA.A. 1 Identifying and Using Multiplication Properties

4.OA.A.1: Interpret a multiplication equation as a comparison.

1. Name the property shown by each model.

$(3 \times 2) \times 5=3 \times(2 \times 5)$

$4 \times 6=4 \times(5+1)=(4 \times 5)+(4 \times 1)$
Solution:
2. Name the property used in the following equations.
a. $\quad 0 \times 50=0$
b. $\quad 8 \times 16=8 \times 10+8 \times 6$
c. $\quad 12 \times 5=5 \times 12$
d. $(3 \times 7) \times 6=3 \times(7 \times 6)$

Solution:

## Solution:

a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$

Solution:
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
4. Show two ways to group by using the associative property.

Solution:
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
5. Write a word problem that can be solved by using the following numbers: $(3 \times 5) \times 2$
6. Which is the missing number?
A. 15
$4 \times 25=(4 \times$ $)+(4 \times 5)$
B. 10
C. 23
D. 20

## Solution:

## tutorified

## 4.OA.A. 1 Identifying and Using Multiplication Properties

4.OA.A.1: Interpret a multiplication equation as a comparison.

1. Name the property shown by each model.

$4 \times 6=4 \times(5+1)=(4 \times 5)+(4 \times 1)$
Solution: Distributive Property

$(3 \times 2) \times 5=3 \times(2 \times 5)$

Solution:
Associative Property
2. Name the property used in the following equations.
a. $\quad 0 \times 50=0$
b. $8 \times 16=8 \times 10+8 \times 6$
c. $\quad 12 \times 5=5 \times 12$
d. $(3 \times 7) \times 6=3 \times(7 \times 6)$

## Solution:

a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
3. Use the distributive property to find the product.
a. $\quad 6 \times 16$
b. $5 \times 13$
c. $\quad 8 \times 12$
d. $\quad 2 \times 75$

## Solution:

a. $(6 \times 10)+(6 \times 6)=60+36=96$
b. $(5 \times 10)+(5 \times 3)=50+15=65$
c. $(8 \times 10)+(8 \times 2)=80+16=96$
d. $(2 \times 70)+(2 \times 5)=140+10=150$
4. Show two ways to group by using the associative property.
a. $\quad 1 \times 9 \times 5$
b. $\quad 7 \times 4 \times 4$
c. $\quad 5 \times 8 \times 2$
d. $\quad 3 \times 3 \times 6$

Solution:
a. $(1 \times 9) \times 5$ or $1 \times(9 \times 5)$
b. $(7 \times 4) \times 4$ or $7 \times(4 \times 4)$
c. $(5 \times 8) \times 2$ or $5 \times(8 \times 2)$
d. $(3 \times 3) \times 6$ or $3 \times(3 \times 6)$
5. Write a word problem that can be solved by using the following numbers: $(3 \times 5) \times 2$
6. Which is the missing number?
A. 15
$4 \times 25=(4 \times$ $\qquad$ $)+(4 \times 5)$
B. 10
C. 23
D. 20

## Solution:

D. 20

Solution: (Answers may vary)
Kobe went to a toy store to buy 2 boxes of marbles. Each box contains 3 bags with 5 marbles in each bag. How many marbles did Kobe buy in all?

