## **Multiplication Three Ways**

Draw lines to connect the groups of objects with the correct equations and total!

3+3	2x3	6
5+5	2x5	10
3+3+3	3x3	9
4+4+4	4x3	12
7+7	7x2	14





## It's Associative!

One of the multiplication properties is *associative*, which means you can group the factors in a multiplication equation and still get the same product.

$$A \times (B \times C) = (A \times B) \times C$$

Find the missing number according to the associative property.



Find the product of these numbers.

7 x (2 x 1) = 
$$2 x (7 x 1) =$$
  
10 x (3 x 4) = 10 x = (10 x 3) x 4 = x 4 = (10 x 3) x 4 = (10 x 4) = (10 x 4)

When you group the factors differently, do the two equations have the same product? \_\_\_\_\_

Date \_\_\_\_\_

## Introduction to Multiplication: Adding Groups

Learn how to multiply by thinking of numbers as groups. Use the groups of tulips to help you answer each multiplication problem.





\_\_\_\_ groups each with \_\_\_\_ tulips each There are \_\_\_\_ tulips in total. \_\_\_\_ x \_\_\_ = \_\_\_



groups each with tulips each.
There are tulips in total.
× =



\_\_\_\_ groups each with \_\_\_\_ tulips each. There are \_\_\_\_ tulips in total.

\_\_\_\_ × \_\_\_\_ = \_\_\_\_



\_\_\_\_ groups each with \_\_\_\_ tulips each. There are \_\_\_\_ tulips in total.





groups each with tulips each.
There are tulips in total.
x =



## **It's Distributed!**

One of the multiplication properties is *distributive*, which means you can multiply a sum or difference by multiplying each number separately and then adding or subtracting the products.

Find the product.  

$$7 \times (5+2) = 7 \times (\_) = (\_) = (3 \times 8) - (3 \times 4) = (\_) - (\_) = (\_)$$

Rewrite the equations. See the example.

$$5 \times (6+1) = (5 \times 6) + (5 \times 1)$$
  
= 30 + 5 =  
= 35 =

=

\_

$$9 \times (9 - 3) =$$





Bunny needs help finding the right carrot. Multiply the numbers in each box and color the carrot with the correct answer.



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