

# Using Order to Multiply

Name: \_\_\_\_\_

Write the missing numbers in the boxes to make each multiplication problem true.

$5 \times 6 = \square$

$2 \times 6 = \square$

$4 \times 5 = \square$

$6 \times 5 = \square$

$6 \times 2 = \square$

$5 \times 4 = \square$

$3 \times 8 = \square$

$4 \times 7 = \square$

$5 \times 9 = \square$

$8 \times 3 = \square$

$7 \times 4 = \square$

$9 \times 5 = \square$

$9 \times 2 = \square$

$\square \times 5 = 15$

$7 \times 8 = \square$

$2 \times \square = 18$

$5 \times 3 = \square$

$\square \times 7 = 56$

$\square \times 10 = 70$

$\square \times 5 = 10$

$3 \times \square = 12$

$10 \times \square = 70$

$5 \times \square = 10$

$\square \times 3 = 12$

**1** Look at  $6 \times 5$  and  $5 \times 6$ . How does the order of the factors change the product?

**2** Draw two arrays to show  $4 \times 7$  and  $7 \times 4$ .

## Using Grouping to Multiply

Name: \_\_\_\_\_

**Draw parentheses around the numbers you want to multiply first.  
Then find the product.**

**1**  $6 \times 3 \times 2$   
 $6 \times (3 \times 2)$   
 $6 \times 6 = 36$

**2**  $4 \times 3 \times 3$

**3**  $5 \times 2 \times 8$

Sample Student Work:  
 $3 \times 2 = 6; 6 \times 6 = 36$

**4**  $8 \times 2 \times 4$

**5**  $2 \times 2 \times 7$

**6**  $6 \times 5 \times 2$

**7**  $3 \times 3 \times 7$

**8**  $2 \times 4 \times 5$

**9**  $7 \times 4 \times 2$

**10**  $6 \times 3 \times 3$

**11**  $3 \times 3 \times 10$

**12**  $2 \times 3 \times 4$

**13** How did you decide which factors to group?

**14** Choose one problem. Tell two ways you can group the factors. Then explain which way is easier for you to solve.

## Using Order and Grouping to Multiply

Name: \_\_\_\_\_

Order and group the factors to show how you want to multiply. Then find the product.

1  $5 \times 7 \times 2$   
 $5 \times 2 \times 7$   
 $(5 \times 2) \times 7$   
 $10 \times 7 = 70$

2  $3 \times 5 \times 3$

3  $4 \times 8 \times 2$

4  $2 \times 9 \times 5$

5  $2 \times 10 \times 5$

6  $2 \times 8 \times 2$

7  $3 \times 9 \times 3$

8  $5 \times 2 \times 6$

9  $4 \times 5 \times 2$

10  $2 \times 9 \times 2$

11  $3 \times 8 \times 2$

12  $4 \times 2 \times 7$

13 What strategies did you use to decide how to order and group the factors?

14 Why do you need to reorder factors in some problems?

## Understanding of Division Models

Name: \_\_\_\_\_

- 1** Draw a model to show  $12 \div 6$ . Show 6 equal groups. How many are in each group?

There are 12 in all. There are 6 equal groups. There are \_\_\_\_\_ in each group.  
 $12 \div 6 =$  \_\_\_\_\_

- 2** Draw a model to show  $12 \div 6$ . Show 6 in each group. How many groups are there?

There are 12 in all. There are 6 in each group. There are \_\_\_\_\_ groups.  
 $12 \div 6 =$  \_\_\_\_\_

- 3** Draw an array to find  $21 \div 3$ .

- 4** Draw an array to find  $20 \div 4$ .

$$21 \div 3 = \underline{\hspace{2cm}}$$

$$20 \div 4 = \underline{\hspace{2cm}}$$

- 5** What situation could be modeled with the equation  $40 \div 8 = 5$ ?