

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

## Associative Property of Multiplication

The **Associative Property of Multiplication** states that the product of a set of numbers is the same, no matter how they are grouped.

example:  $(2 \times 3) \times 4 = 2 \times (3 \times 4)$   
 $6 \times 4 = 2 \times 12$   
 $24 = 24$

Find the products for each. First solve the part in parenthesis and write a new multiplication fact on the first line. Then write the product on the bottom line.

a.  $(4 \times 2) \times 6 = 4 \times (2 \times 6)$   
\_\_\_\_\_  
\_\_\_\_\_

b.  $(2 \times 5) \times 3 = 2 \times (5 \times 3)$   
\_\_\_\_\_  
\_\_\_\_\_

c.  $(4 \times 5) \times 2 = 4 \times (5 \times 2)$   
\_\_\_\_\_  
\_\_\_\_\_

d.  $(4 \times 7) \times 1 = 4 \times (7 \times 1)$   
\_\_\_\_\_  
\_\_\_\_\_

e.  $(6 \times 2) \times 5 = 6 \times (2 \times 5)$   
\_\_\_\_\_  
\_\_\_\_\_

f.  $(3 \times 3) \times 4 = 3 \times (3 \times 4)$   
\_\_\_\_\_  
\_\_\_\_\_

g.  $(3 \times 2) \times 2 = 3 \times (2 \times 2)$   
\_\_\_\_\_  
\_\_\_\_\_

★  $(2 \times 2) \times (4 \times 1) = 2 \times (2 \times 4) \times 1$   
\_\_\_\_\_  
\_\_\_\_\_

# ANSWER KEY

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The **Associative Property of Multiplication** states that the product of a set of numbers is the same, no matter how they are grouped.

example:  $(2 \times 3) \times 4 = 2 \times (3 \times 4)$   
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Find the products for each. First solve the part in parenthesis and write a new multiplication fact on the first line. Then write the product on the bottom line.

a.  $(4 \times 2) \times 6 = 4 \times (2 \times 6)$

$8 \times 6$  =  $4 \times 12$

48 = 48

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

$10 \times 3$  =  $2 \times 15$

30 = 30

c.  $(4 \times 5) \times 2 = 4 \times (5 \times 2)$

$20 \times 2$  =  $4 \times 10$

40 = 40

d.  $(4 \times 7) \times 1 = 4 \times (7 \times 1)$

$28 \times 1$  =  $4 \times 7$

28 = 28

e.  $(6 \times 2) \times 5 = 6 \times (2 \times 5)$

$12 \times 5$  =  $6 \times 10$

60 = 60

f.  $(3 \times 3) \times 4 = 3 \times (3 \times 4)$

$9 \times 4$  =  $3 \times 12$

36 = 36

g.  $(3 \times 2) \times 2 = 3 \times (2 \times 2)$

$6 \times 2$  =  $3 \times 4$

12 = 12

★  $(2 \times 2) \times (4 \times 1) = 2 \times (2 \times 4) \times 1$

$4 \times 4$  =  $2 \times 8 \times 1$

16 = 16